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PERSONAL.

Mr. Edwin A. Fisher has been reappointed City Engineer of Rochester, N. Y.

Mr. W. H. Reynolds has been elected Chief Engineer of Water-Works at Galveston, Tex.

Mr. Frank T. Hogg has been appointed Chief Engineer of the Monongahela River coal combine.

Mr. A. K. Baylor, of London, is now in the United States in the interests of various British street railways.

Mr. A. B. Mader, C. E., U. S. Deputy Mineral Surveyor, has opened an office at Prescott, Arizona, as consulting engineer.

Professor S. V. Browne has assumed the direction of the Naval Observatory at Washington, on the retirement of Professor Harkness.

Mr. S. P. Bush, Superintendent of Motive Power for the Pennsylvania R. R., will take a similar position with the Chicago, Milwaukee & St. Paul R. R.

Col. Theodore H. Ficklin has been employed by the Committee on Streets at Alexandria, Va., in connection with street improvements in that city.

Mr. Karl Tingsten, the head of the street cleaning department of Stockholm, Sweden, is in this country making an inspection of the methods of street cleaning in various cities.

Mr. Samuel M. Gray, C. E., of Providence, R. I., has been asked by General Ludlow, Governor-General of Havana, Cuba, to visit Havana and advise in regard to a sewerage system for that city.

Mr. Edward P. Butts, C. E., Assoc. M. Am. Soc. C. E., will withdraw on Jan. 1 from the firm Butts & Crosby, Architects and Engineers, Hartford, Conn., and become Chief Engineer of the American Writing Paper Co., with offices at Holyoke, Mass.

Mr. F. C. Kretschmer, recently the New York representative of the Brown & Sharpe Mfg. Co., of Providence, R. I., has gone to Berlin, Germany, to enter the service of Gustav Diechmann & Co., an importer of American machine tools into Germany.

Mr. Seizo Misaki, of Kobe, Japan, Chief Engineer of the Hanshin Electric Ry. Co., has recently returned to Japan after an extended visit in this country. Mr. I. Ikeda, who accompanied Mr. Misaki, will remain in this country to make a further study of electric traction.

MM. L. Marechal and V. Peyras, of Paris, and A. Paris, of Arles, France, officials of the Paris & Mediterranean Ry., are making a tour of inspection of the railway systems of the United States for the purpose of reporting on the advisability of adopting American railway methods in France.

Mr. Charles Evan Fowler, M. Am. Soc. C. E., 11 Broadway, New York city, has been appointed Supervising Engineer on the construction of the steel work for the new city prison in Manhattan and on a recreation pier in Brooklyn, N. Y., and is consulting engineer on the arched trusses and steel frame for a large auditorium in New York city.

OBITUARY.

Mr. E. H. Thompson, an engineer of the Bureau of Highways of Philadelphia, died recently at his home in Philadelphia.

Mr. James W. Reis, general manager of the National Steel Co., died Dec. 17 at his home in New Castle, Pa., aged about 35 years.

Mr. Terrance McGowan, a civil engineer, formerly a member of the firm of Coffey & Co., railroad contractors, died in Denison, Tex., Dec. 6.

Mr. William F. Cook, a member of the firm of J. H. & W. F. Cook, civil engineers, died at his home in Pittsburg, Pa., on Dec. 12. He was 30 years of age.

Col. J. W. Adams, M. Am. Soc. C. E., at one time editor of this journal, died on Dec. 13. A full account of his life will be found on another page of this issue.

Mr. M. A. Duke, mining engineer for the Bear Gulch and Revenue mining companies, of Jardine, Mont., was instantly killed Dec. 8 by being thrown from a carriage by a runaway horse. Mr. Duke was a prominent mining expert and represented English capital in the properties at Jardine.

Mr. Charles E. Noble died Dec. 16 at his home in Morristown, N. J. Mr. Noble was born at Southwark, Mass., and was educated at Suffield Literary Institute, Suffolk, Conn. Afterward he followed the profession of civil engineering. In 1851 he was appointed Chief Assistant Engineer of the Morris & Essex R. R. He later became Chief Engineer and Superintendent of the same road. In 1870 he built about 700 miles of the International & Great Northern R. R.

Mr. Walter Shanly, C. E., died Dec. 17, at Montreal, Que., where he resided. Mr. Shanly was born in Queens county, Ireland, in 1819. He was educated by private tuition and adopted the profession of civil engineering. As a young man he was employed by the government of Canada on the Beauharnois and Welland canals. In 1851-53 he was engineer of the Ottawa & Prescott Ry., and until 1859 of the Grand Trunk Ry. His most important work as a railway contractor is the Hoosac Mountain Tunnel, Mass., which he successfully constructed in conjunction with his brother, the late Francis Shanly, C. E. He served at various times in the Canadian Parliament.

ENGINEERING SOCIETIES.

COMING GENERAL MEETINGS.

AMERICAN ECONOMIC ASSOCIATION.
Dec. 27 and 28. Annual meeting at Ithaca, N. Y.
AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.
Dec. 28. at New Haven, Conn. Secy., F. W. Putnam, Salem, Mass.
MICHIGAN ENGINEERING SOCIETY.
Jan. 2, 1900. Annual meeting at Kalamazoo, Mich. Secy., F. Hodgman, Climax, Mich.
MONTANA SOCIETY OF ENGINEERS.
Jan. 12 to 13. Annual meeting at Bozeman, Mont. Secy., A. S. Hovey, Butte, Mont.
AMERICAN ASSOCIATION OF INVENTORS AND MANUFACTURERS.
Jan. 16. Annual meeting at Washington, D. C. Secy., Arthur Stuart, Washington, D. C.
NORTHWESTERN ELECTRICAL ASSOCIATION.
Jan. 17. Annual meeting at Milwaukee, Wis. Secy., Thos. R. Mercein, 85 Michigan St., Milwaukee, Wis.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
Jan. 17 and 18. Annual meeting at New York city. Secy., C. W. Hunt, 220 W. 57th St., New York city.
AMERICAN SOCIETY OF HEATING AND VETILATING ENGINEERS.
Jan. 23 to 25. Annual meeting at New York city. Secy., W. M. Mackay, P. O. Box 1818, New York city.
OHIO SOCIETY OF CIVIL ENGINEERS AND SURVEYORS.
Jan. 24 to 26. Annual meeting at Columbus, O. Secy., C. N. Brown, Columbus, O.
ILLINOIS SOCIETY OF ENGINEERS AND SURVEYORS.
Jan. 24 to 26. Annual meeting at Moline, Ill. Secy., Jacob A. Harman, Peoria, Ill.
LAKE SUPERIOR MINING INSTITUTE.
Feb. 6. Annual meeting at Iron Mountain, Mich. Secy., F. W. Speer, Houghton, Mich.

COMING LOCAL MEETINGS.

ENGINEERS' CLUB OF CINCINNATI.
Dec. 24. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.
CIVIL ENGINEERS' CLUB OF CLEVELAND.
Dec. 26. Secy., W. H. Searles, Case Library Bldg., Cleveland, O.
ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Jan. 1. At Buffalo. Secy., H. J. March, Library Bldg., Buffalo, N. Y.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
Jan. 2. At New York. Secy., Francis E. Frothingham, 12 W. 31st St., New York city.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
Jan. 3. At New York. Secy., C. W. Hunt, 220 W. 57th St., New York city.
ENGINEERS' CLUB OF ST. LOUIS.
Jan. 3. Secy., Richard McCulloch, 2401 N. Spring Ave., St. Louis, Mo.
ENGINEERS' CLUB OF MINNEAPOLIS.
Jan. 4. Secy., H. E. Smith, 1620 S. E. 4th St., Minneapolis, Minn.
TECHNICAL SOCIETY OF THE PACIFIC COAST.
Jan. 4. At San Francisco. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.
CHICAGO ELECTRIC[illegible]TION.
Jan. 5. Secy., Cloyd Marshall, 1310 Monon Bldg., Chicago, Ill.
ENGINEERS' CLUB OF COLUMBUS.
Jan. 6. Secy., H. M. Gates, 12½ North High St., Columbus, O.
DENVER SOCIETY OF CIVIL ENGINEERS.
Jan. 9. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.
NEW ENGLAND RAILROAD CLUB.
Jan. 9. At Boston. Secy., Edw. L. Jones, P. O. Box 1158, Boston, Mass.
NORTHWEST RAILWAY CLUB.
Jan. 9. At Minneapolis. Secy., T. A. Fogue, Soo Line, Minneapolis, Minn.
ST. LOUIS RAILWAY CLUB.
Jan. 12. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.
ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA.
Jan. 16. At Pittsburg. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.
WESTERN RAILWAY CLUB.
Jan. 16. At Chicago. Secy., J. W. Taylor, 667 The Rookery, Chicago, Ill.
BOSTON SOCIETY OF CIVIL ENGINEERS.
Jan. 17. Secy., S. E. Tinkham, City Hall, Boston, Mass.
NEW YORK RAILROAD CLUB.
Jan. 18. At New York city. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.
MONTANA SOCIETY OF CIVIL ENGINEERS.
Jan. 20. At Helena. Secy., Albert S. Hovey, Helena, Mont.

TECHNISCHER VEREIN OF NEW YORK.—The next meeting will be held Dec. 23, when Herr Nemo Roehrich, a member of the society, will deliver a lecture on "The Latest Lithographic Press for Polychrome Printing." The subject of this address is a press by means of which 15 colors may be imprinted at a single passage of the paper through the machine. The inventor is Herr Edward Hett. Herr Roehrich has also spent a number of years in assisting to perfect the device.

BROOKLYN ENGINEERS' CLUB.—The annual meeting and dinner of the club was held Dec. 14. According to the constitution Mr. Walter M. Meserole retired as president and was succeeded by Mr. George W. Tilson. Mr. Andrew J. Provost, Jr., was chosen Secretary, and Mr. Calvin W. Brice, treasurer. All of the speeches were informal and brief. J. W. Roe spoke on "The Chase of the Automobile;" F. S. Woodward on "Girding the Earth in Twenty Minutes;" H. B. Seaman on "Corporations vs. the Cold World," and W. S. Tuttle on "Why the Castings Came Out Wrong." The club quartet sang several pleasing choruses.

ENGINEERS' CLUB OF TORONTO.—At the regular meeting on Dec. 5 the topic for discussion was "The City Engineer's Report upon Sewage Disposal." The following motion was adopted by the club:

After full discussion and careful consideration of the question of sewage disposal for the City of Toronto, on which the City Engineer has recently reported, the Engineers' Club is of the opinion that immediate steps should be taken to divert the sewage of the city from the harbor by the construction of intercepting sewers and by treating the sewage by the most approved modern methods; also that a copy of this resolution be sent to the Mayor and the city council.

The topic for the next meeting of the club will be "The Air Line Railway Project from Lake Ontario to Georgian Bay."

MONTANA SOCIETY OF ENGINEERS.—A meeting of the society was held at Butte, Mont., on Dec. 9. A preliminary report from the Committee on Arrangements for the 13th annual meeting, at Bozeman, Mont., was read and adopted. This meeting will be held Jan. 12 to 13. The following preliminary programme has been announced: Excursion to the Chestnut Coal Washer and the Chestnut and Trail Creek Coal mines. Excursion to the U. S. Fish Hatchery in Bridger Canyon. Visit to the Montana College of Agriculture and Mechanical Arts. Annual business session of society, reports of officers and committees, balloting for officers for the ensuing year and for membership, and presidential address. These preliminary arrangements may be somewhat changed. The complete programme will be sent out by the committee later. A number of papers will be read.

A. S. Hovey, Secy.

NEW PUBLICATIONS.

PRACTICAL FORESTRY IN THE ADIRONDACKS. By Henry S. Graves, Superintendent of Working Plans. Pub. Doc., Washington, D. C. Bulletin No. 26, U. S. Department of Agriculture (Division of Forestry). Paper; 8vo.; pp. 84; illustrated.

Much has been said about the general principles and advantages of forestry, but in this report we have particulars of work actually done in the line of practical forestry in this country. Two tracts of forest land in the Adirondacks are being worked on plans agreed upon between the owners and the Forestry Division, and particulars are given of the local conditions, the timber growth, the methods of lumbering and the incidental injuries, and the special plan adopted for effecting improvements under the supervision of the government officials. The report is illustrated by a large number of half-tone engravings.

STATE BOARD OF HEALTH OF MASSACHUSETTS.—Report for 1898. S. W. Abbott, M.D., Secretary. Boston: State Doc. Cloth; 6×9 ins.; pp. xxxix., 878; tables and diagrams.

Besides the usual valuable information regarding water and sewage purification, the inland waters and public water supplies of the state, and the general work of the board, this report contains some especially notable features. The review of the work of the Lawrence experiment station includes some interesting studies on the septic tank and the so-called bacterial or contact filters which have recently been creating so much of a stir in England, and no small stir here. The section on water purification describes some quite extended studies of the Bacillus Coli Communis in the effluents from both the Lawrence City and the experimental filters. These subjects are treated by Mr. H. W. Clark, Chemist to the Board, and in charge of the station. Mr. Clark also has a valuable paper on "The Action of Water Upon Lead, Tin and Zinc, with Especial Reference to the Use of Lead Pipes with Massachusetts Water Supplies." This paper is very timely in view of many recent cases of lead-poisoning at Lowell, Mass., attributed to the action of ground water upon lead service pipes. One of the best things in the report is a series of descriptions of the various city sewage purification plants in the state (except Worcester) and a review of their operations, by Mr. X. H. Goodnough, Chief Engineer, and Mr. Wm. S. Johnson, Assistant Engineer, of the Board.

THE FERRY; THE CHARLES RIVER BRIDGE AND THE CHARLESTOWN BRIDGE. A historical statement prepared for the Boston Transit Commission by its Chairman and submitted at the opening of the new bridge, Nov. 27, 1899. Boston Transit Commission; George G. Crocker, Charles H. Dalton, Thomas J. Gargan, George F. Swain, Horace G. Allen. Boston. Paper; 9¼×5¾ ins.; pp. 12.

This unusual public document traces the history of the crossing of Charles River from the ferry established in 1630 to the modern bridge so recently opened to traffic. The first bridge was a wooden structure on piles, 1,470 ft. long and 42 ft. wide, with a 30-ft. draw-opening. It was built as a toll bridge by a company, including John Hancock among its members, and was formally opened to traffic on June 17, 1786. Josiah Quincy, in his "Recollections," says that this bridge was so profitable, in 1826, that each holder of an original share had received back his principal and $7,000 in profits. It remained a toll bridge until 1858; but the profits accruing to the proprietors gave rise to long continued litigation in defence of what they claimed was an exclusive franchise. But the opening of the Warren St. bridge, in 1828, and its freedom from all tolls in 1836, marked the beginning of the end for the old Charles River bridge, and, in 1841, it was bought by the State for $25,000 and turned over to the City of Boston in 1874. The present bridge was built for the Boston Transit Commission by William Jackson, City

Engineer of Boston, and John B. Cheney, Assistant Engineer. It was commenced on Aug. 15, 1896, and is 1,920 ft. long, with 1,090 ft. of this over the water. It is a steel bridge on stone piers, built by the A. & P. Roberts Co., and is 100 ft. wide, with two 29 ft. roadways and two 10-ft. sidewalks, and a central space, 22 ft. wide, for street-car tracks. The fixed spans are 85 ft. long each, and the draw-span is 240 ft. long, with two 50 ft. openings for vessels. The underside of the draw is 23 ft. above mean high tide. The bridge has cost $1,100,000, with some outstanding claims still unsettled. The old Charles River bridge is now being removed. It might be mentioned here that the total capital stock of the old Charles River Bridge Co. was £15,000 or $75,000, divided into 150 shares of the value of £100 each. The old bridge was designed by Major Samuel Sewall.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 8½ x 6 ins., 6 x 9 ins., and 9 x 12 ins.)

MACHINE BELTING.—Shultz Belting Co., St. Louis, Mo. Paper; 5 × 6½ ins.; pp. 72; illustrated.

This is a catalogue and price list of flat, round and link leather belting, and contains information as to belt dressing and cement, driving power of belts, etc., and extracts from articles on belting.

METAL STRUCTURES.—Chicago Bridge & Iron Co., Chicago, Ill. Paper; 6 × 8¾ ins.; pp. 47; illustrated.

This pamphlet contains several illustrations of the new and enlarged structural steel shops of the company named, but it is devoted primarily to presenting its work in building stand pipes, water tanks, etc., for municipal and railway water storage purposes.

CONCRETE MIXERS.—The Ransome & Smith Co., 149 Broadway, New York, N. Y. Paper; 6½ × 5 ins.; pp. 16; illustrated.

The concrete mixer here described is a rotary drum with wings on the inside of the periphery by which the materials are mixed, and carried up so as to drop into a chute projecting into the drum. It has been used on several important works.

EXHAUST STEAM HEATER AND PURIFIER.—Wickes Bros., Saginaw, Mich. Paper; 10 × 7 ins.; pp. 32; illustrated.

The heater and purifier is a vertical cylinder fitted with a series of dishes or pans having central hubs and openings. The exhaust steam passes down the central opening, heating the water which drips from pan to pan. The sediment and scale are deposited in the pans.

WATER-TUBE BOILERS.—Wickes Bros., Saginaw, Mich. Paper; 7 × 10¼ ins.; pp. 80; illustrated.

The Wickes boiler is vertical and has two vertical cylindrical drums, whose heads are connected by straight tubes with a firebrick partition, so that the products of combustion pass up to and around the upper drum and then down by the other compartment to the base of the chimney. Many of these boilers are in use, and special advantages are claimed for them.

STEEL PORTLAND CEMENT.—Illinois Steel Co., Chicago, Ill. Paper; 8 × 5¾ ins.; pp. 96; illustrated.

This cement is made from furnace slag, but can hardly be called a by-product, as the furnace is run specially (with specially selected ores, etc.) for its production. It has been extensively used on works of varied character, and the publication contains a large number of views of buildings, bridge abutments, foundations, streets, etc., on which the cement has been used, with testimonials as to its quality.

ACETYLENE GAS LIGHTING.—Union Carbide Co., New York and Chicago. Paper; 6 × 9 ins.; pp. 20; illustrated.

This handsome little pamphlet is devoted to the manufacture, use and advantages of "the new illuminant," acetylene gas. It dates the discovery of acetylene back to 1836, and of calcium carbide to 1857, although practically and commercially they date from 1892. There is a list of acetylene generators approved by fire insurance associations, together with the names of their manufacturers.

RIDGWAY'S AUTOMATIC SEWAGE DISTRIBUTOR.—Mather & Platt, Salford Iron Works, Manchester, Eng. Paper; 6 × 9 ins.; pp. 13; illustrated.

This catalogue is devoted to the apparatus for automatically distributing sewage, or other liquids, on filter beds in rotation, which was made the subject of a recent American patent (No. 624,985), noted briefly in our issue of July 13, 1899. One of these distributors has been in use for a year at Bank Hall Lane, near Manchester, Eng., on rapid filter beds designed by T. W. H. Garstang, Medical Officer of Health for the Bucklow Rural District Council, Knutsford, Eng.

DUST-COLLECTING PLANTS FOR FACTORIES, ETC.—Allington & Curtis Mfg. Co., Saginaw, Mich. Paper; 6¾ × 8¾ ins.; pp. 32; illustrated.

In wood and leather working factories, textile mills, etc., great quantities of dust, fiber, shavings and refuse have to be removed for safety, health and convenience, and the plants described in this catalogue and price list remove such material by exhaust fans and piping, with headers to draw the waste and dust directly from the machine and so prevent any accumulation. The dust, etc., is collected in special chambers and may be fed to the boiler furnaces or discharged into any suitable receptacle.

VALVES AND HYDRANTS.—Michigan Brass & Iron Works, Detroit, Mich. Paper; 9 × 6 ins.; pp. 92; illustrated.

This is an illustrated catalogue and price list of valves, hydrants, and general supplies for piping water, steam, gas, oil and ammonia. A great variety of valves are shown for mains and small pipes, including the Hercules high-pressure valve, which has been described in our columns. One of the hydrants is shown fitted with a water crane for supplying sprinkling carts, and there is also a 42-in. gate valve operated by hydraulic power instead of the gearing usually employed for large valves. Valve boxes, air valves, foot valves, and other specialties are included.

BOILER-SHOP AND SHIPBUILDING TOOLS.—Wickes Bros., Saginaw, Mich. Paper; 10 × 7 ins.; pp. 32; illustrated.

This pamphlet contains a description of horizontal and vertical bending rolls, the live rolls of which are driven by gearing by means of an engine on the bed plate. Punching and shearing machines, flanging clamps, and hydraulic flanging presses and portable riveters are also shown. In addition to illustrations of the machines there are half-tone engravings of the largest Scotch boiler on the Lakes (16 ft. diameter, of 1⅜-in. plate), and of the car transfer boat "Pere Marquette," of the F. & P. M. R. R. The ship and boiler plate of this great vessel were rolled on Wickes rolls.

STEEL, CEMENT AND MINERAL WOOL.—Illinois Steel Co., Chicago, Ill. Leather; 11 × 8 ins.; pp. 164; illustrated.

This handsome publication describes the company's several plants, and has sections of various rails and splice bars, structural and machinery shapes, etc., with such special shapes as rail base plates, car truck channels, cultivator beams, frog fillings, tie-plates, etc. There are also tables of weights and dimensions of standard commercial shapes, quantities of track material per mile, and the standard specifications of the Association of American Steel Manufacturers. "Steel Portland" cement and mineral wool are two important by-products. At the end of the book are tables of various foreign weights and measures.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened	Work.	Place.	See Eng. News.
Dec. 21.	Pumping engine,	Martins Ferry, Ohio	Nov. 30
Dec. 22.	School building,	Pittsburg, Pa.	Dec. 21
Dec. 23.	Public lighting,	Pittsburg, Pa.	Dec. 21
Dec. 23.	Overhead equipment,	Blackburn, England	Dec. 14
Dec. 23.	Sewer,	New York, N. Y.	Dec. 14
Dec. 23.	Road,	San Juan, Porto Rico	Oct. 26
	Advertised, Eng. News, Oct. 26 to Dec. 7.		
Dec. 25.	Paving,	South Bend, Ind.	Dec. 14
Dec. 26.	Boilers, etc.,	Los Angeles, Cal.	Dec. 14
Dec. 26.	Road bonds,	West Hoboken, N. J.	Nov. 30
Dec. 26.	Collecting garbage,	New Haven, Conn.	Dec. 21
Dec. 26.	Naval supplies,	Philadelphia & Washington	Dec. 21
Dec. 26.	Street improvement,	Salem, Ill.	Dec. 21
Dec. 26.	Elevator,	New York, N. Y.	Dec. 21
Dec. 26.	Asphalt paving,	Toronto, Ont.	Dec. 21
Dec. 26.	Electric plant and water bonds,	Nelson, B.C.	Dec. 21
Dec. 27.	Water-works,	Carbondale, Ill.	Dec. 21
Dec. 27.	Pavilion,	New York, N. Y.	Dec. 21
Dec. 27.	Sale of pipe, tanks, etc.,	Middletown, Pa.	Dec. 14
Dec. 27.	Electric lighting,	Oswego, N. Y.	Dec. 14
	Advertised, Engineering News, Dec. 14.		
Dec. 28.	Hydraulic dredge,	New Orleans, La.	Nov. 30
Dec. 28.	Electric plant,	Gloucester, Eng.	Dec. 7
Dec. 28.	Park improvements,	New York, N. Y.	Dec. 21
Dec. 28.	Building supplies,	New York, N. Y.	Dec. 21
Dec. 29.	Paving,	Cincinnati, O.	Dec. 7
Dec. 30.	Pier extension,	St. Joseph, Mo.	Dec. 7
	Advertised, Eng. News, Dec. 7 to 28.		
Dec. 30.	Bridge,	Denver, Colo.	Dec. 7
Dec. 30.	Tunnels (2),	West Virginia	Dec. 7
	Advertised, Engineering News, Dec. 7.		
Dec. 30.	Canal (9 miles),	Ottawa, Ont.	Dec. 7
Dec. 30.	Water-works,	Elkins, W. Va.	Dec. 7
	Advertised, Eng. News, Dec. 7 to 21.		
Dec. 30.	Aqueduct,	Panama, Colombia	Oct. 26
Dec. 30.	Water-works,	Panama, Colombia	Nov. 23
Dec. 30.	Air shaft,	Henry, W. Va.	Dec. 7
	Advertised, Engineering News, Dec. 7.		
Dec. 30.	Sewer work,	Albany, N. Y.	Dec. 21
Dec. 30.	Retaining wall,	Philadelphia, Pa.	Dec. 21
Dec. 31.	Electric lighting plant,	Mistrettra, Italy	Nov. 23
Dec. 31.	Electric lighting,	Porto Alegre, Brazil.	Oct. 26
Jan. 1.	Water supply and plans,	Levis, Que.	Nov. 9
Jan. 1.	W.-wks & elec. l't plant,	Charlestown, Ind.	Nov. 16
Jan. 1.	Air compressing machinery,	London, Eng.	Nov. 16
Jan. 1.	Railway (27 miles),	Lumberton, N.C.	Nov. 23
Jan. 1.	Plans for sewers, etc.,	Pittsburg, Pa.	Dec. 14
Jan. 1.	Poles (7,000),	Winnepeg, Man.	Dec. 21
Jan. 2.	Sewers,	Elizabeth, N. J.	Dec. 21
Jan. 2.	Bridges,	Montezuma, Ia.	Dec. 21
Jan. 2.	Electric machinery,	Helena, Mont.	Dec. 14
Jan. 2.	Cells,	Alturas, Cal.	Dec. 14
Jan. 2.	Electric light franchise,	Marysville, Cal.	Nov. 23
Jan. 2.	Reservoir,	Llanelly, Wales.	Nov. 30
Jan. 2.	Road improvements,	Sausalito, Cal.	Nov. 30
Jan. 2.	Bridge,	Saginaw, Mich.	Dec. 7
Jan. 2.	Cement,	St. Paul, Minn.	Dec. 7
	Advertised, Eng. News, Dec. 7 to 28.		
Jan. 3.	Bridge superstructure,	Lockport, Ill.	Nov. 16
	Advertised, Engineering News, Nov. 16.		
Jan. 3.	Water-wks and drainage,	Conception, Chili.	Oct. 26
Jan. 3.	Court house,	Pipestone, Minn.	Dec. 14
Jan. 3.	Grading,	Fairview, N. J.	Dec. 21
Jan. 4.	Street railway equipment,	Greenville, S.C.	Dec. 21
	Advertised, Eng. News, Dec. 21 and 28.		
Jan. 4.	Power house,	Greenville, S. C.	Dec. 21
	Advertised, Eng. News, Dec. 21 and 28.		
Jan. 4.	Extending water-works,	Butte, Mont.	Dec. 14
	Advertised, Eng. News, Dec. 14 to 28.		
Jan. 4.	Officers' quarters,	Ft. Hamilton, N. Y.	Dec. 14
Jan. 4.	Railway (200 miles),	Ceylon.	Sept. 7
Jan. 4.	Jail,	Alexandria, Minn.	Dec. 7
Jan. 5.	City hall,	Columbia, S. C.	Dec. 21
Jan. 6.	Pumps (2),	Victoria, B. C.	Dec. 21
Jan. 6.	Electric traction work,	Glasgow, Scotland.	Dec. 21
Jan. 6.	Street improvements,	Roanoke, Va.	Dec. 21
Jan. 6.	Hospital buildings,	Swindon, England	Nov. 16
Jan. 6.	Water mains (416 tons),	Roscommon, Ire.	Nov. 23
Jan. 8.	Dredging,	Savannah, Ga.	Dec. 14
	Advertised, Eng. News, Dec. 14 to Jan. 4.		
Jan. 8.	Sewer bonds,	Salisbury, N. C.	Dec. 21
Jan. 9.	Jail,	Nevada City, Cal.	Dec. 14
Jan. 9.	Dredging,	Boston, Mass.	Dec. 14
	Advertised, Eng. News, Dec. 14 to Jan. 4.		
Jan. 9.	Sewer (10 miles),	Salisbury, N. C.	Dec. 7
	Advertised, Eng. News, Dec. 7 to 21.		
Jan. 10.	Bridge,	Redding, Cal.	Nov. 30
Jan. 10.	Masonry arch,	Cleveland, O.	Dec. 14
Jan. 10.	Court house,	Selma, Ala.	Dec. 21
Jan. 11.	Pipe sewers,	Williamsport, Pa.	Dec. 21
	Advertised, Engineering News, Dec. 21.		
Jan. 11.	Electric plant,	Gastonia, N. C.	Dec. 7
	Advertised, Eng. News, Dec. 7 to 21.		
Jan. 11.	Water-works,	Gastonia, N. C.	Dec. 7
	Advertised, Eng. News, Dec. 7 to 21.		
Jan. 11.	Timber,	Cape Town, Cape Colony	Dec. 7
Jan. 11.	Sewerage system,	Gastonia, N. C.	Dec. 7
	Advertised, Eng. News, Dec. 7 to 21.		
Jan. 12.	Bridge Bonds,	La Crosse, Wis.	
Jan. 12.	Machinery,	New Orleans, La.	Nov. 30
Jan. 13.	Breakwater,	Michigan City, Ind.	Dec. 14
	Advertised, Eng. News, Dec. 14 to Jan. 4.		Dec. 14
Jan. 15.	Rapid transit tunnel,	New York.	
Jan. 15.	Railway franchise purchase,	Salinas, Cal.	Nov. 16
Jan. 15.	Electric wiring,	Chicago, Ill.	Dec. 21
Jan. 15.	Pier extension,	Portage, Mich.	Dec. 21
	Advertised, Eng. News, Dec. 21 to Jan. 11.		Dec. 21
Jan. 15.	Railway ties,	New York, N. Y.	
Jan. 15.	Breakwater,	Grand Marais, Minn.	Dec. 21
	Advertised, Eng. News, Dec. 21 to Jan. 11.		Dec. 21
Jan. 16.	Sanitary bonds ($1,000,000),	Chicago, Ill.	Dec. 21
Jan. 16.	Street improvements,	Cincinnati, O.	Dec. 21
Jan. 16.	Generator,	Newcastle-upon-Tyne, Eng.	Dec. 14
Jan. 17.	Pier extension,	Grand Haven, Mich.	Dec. 21
	Advertised, Eng. News, Dec. 21 to Jan. 11.		
Jan. 19.	Pier extensions,	Muskegon, Mich.	Dec. 21
	Advertised, Eng. News, Dec. 21 to Jan. 11.		
Jan. 20.	Ferry slip,	San Francisco, Cal.	Dec. 21
Jan. 20.	Construction materials,	Philadelphia, Pa.	Dec. 21
	Advertised, Eng. News, Dec. 21 to Jan. 11.		
Jan. 31.	Water-works,	Ada, Minn.	Oct. 26
Feb. 15.	Sewers and water-works,	Tampico, Mex.	Oct. 12
Jan. 19.	Government building,	Helena, Mont.	Nov. 30
Jan. 26.	Waterway, shafts, etc.,	Valletta, Malta.	Nov. 30
Feb. 1.	School building plans,	Toronto, Ont.	Nov. 30
Feb. 1.	Government building,	Boise, Idaho	Dec. 7
Feb. 27.	Mining lease,	St. Petersburg, Russia.	Nov. 2
Feb. 28.	Railway (75 miles),	Matthews, Ind.	Nov. 23
Mar. 12.	Plans for hall,	Belfast, Ireland.	Nov. 23
Mar. 23.	Iron bridge,	Delagoa Bay, So. Africa	Dec. 14

RAILWAYS.

ARIZONA.—Press reports state that work will probably be begun before next February on the construction of a new line from Flagstaff, on the Santa Fe Pacific Ry., to Globe, Ariz., the present terminus of the Globe, Gila Valley & Northern Ry., a distance of 200 miles. Epis Randolph, Division Supt. of Southern Pacific, Tucson, Ariz., is said to be interested.

ATLANTA BELT LINE.—G. F. Huggans, Ch. Engr., Montgomery, Ala., informs us that this proposed steam railway will be seven miles in length and will run just outside the city limits of Atlanta, Ga. The line has been located and is under construction by A. & C. Wright & Co., Richmond, Va.; grading and masonry work is well under way. Geo. C. Smith, Pres., Atlanta.

BURLINGTON & MISSOURI RIVER.—Surveys will soon be begun, according to reports, or a new line from Alliance to Brush, Neb. Construction is expected to be done in the spring.

CANADIAN PACIFIC.—This company will apply to the dominion parliament next session for an act authorizing the company to construct or acquire and to operate a railway from Morden to Miami, and thence to Carman, Manitoba, and also a railway from Hartney and Souris to Boisevain and Ninga, on the Manitoba & Southwestern Colonization Ry. Another company desires to build a line from Pyramid Harbor to Dawson, via Kluckwan and the Dalton trail. This latter company will ask for incorporation at the next session of the dominion parliament.

CENTRAL NEW ENGLAND.—C. H. Ewing, Ch. Engr., Hartford, Conn., informs us that track-laying has been completed on the new extension from Tariffville, Conn., to Springfield, Mass., 14.35 miles. The bridge work was done by the Phoenix Bridge Co., Phoenixville, Pa., and the grading and masonry by Ryan & Kelly, 8 South Broad St., Philadelphia, Pa.; John W. Brock, Pres., Philadelphia.

CHESTNUT RIDGE.—J. B. Fisk, Supt., Kunkletown, Pa., informs us that work has been completed on this road between Lehigh Gap and Kunkletown, via Aquashicola and Little Gap, Pa., 10½ miles, with the exception of about 2½ miles of ballasting which still remains undone.

CHICAGO, DUBUQUE & OMAHA.—C. H. Meyer, Secy., informs us that surveys were commenced Dec. 11 on this proposed line from Debuque, Ia., to the Missouri River, 300 miles. The capital for construction has not yet been obtained, but it is expected to let contracts as soon as the surveys have been completed to Tama county, Ia., or a distance of 100 miles. Bart E. Linehan, Pres.; M. Tschirge, Ch. Engr., both of Dubuque, Ia.

CHICAGO, PADUCAH & SOUTHEASTERN.—F. P. Reed, Secy. and Gen. Mgr., Marion, Ill., informs us that the survey has been made and one-half the right of way obtained for this projected line from Vienna to Metropolis, Ill., and thence to Paducah, Ky., 40 miles. A. K. Vickers, Pres., Vienna, Ill.

COAL & COKE.—This company was incorporated in West Virginia Dec. 16, with a capital stock of $2,000,000, to complete a railway, the survey of which has been made from Elkins, W. Va., 43 miles, to the forks of the Greenbrier River to a connection with the Greenbrier River Ry., now in course of construction by the Chesapeake & Ohio R. R. Co. As advertised in Engineering News of Dec. 7, the company asked for bids until Dec. 30 for the construction of two tunnels, etc. Henry G. Davis, Elkins, W. Va., and R. C. Kerens, St. Louis, Mo., are directors. C. H. Latrobe, Consulting Engr., 813 Merchants' Bank Bldg., Baltimore, Md.

DES MOINES, IOWA FALLS & NORTHERN.—E. S. Ellsworth, Pres., Iowa Falls, Ia., informs us that surveys are now being made for this proposed line from Des Moines to Iowa Falls, via Nevada, Ia. The capital for construction has not yet been secured, but the company expects to be able to let contracts early in the spring. B. Schreiner, Ch. Engr., Des Moines.

DULUTH & NEW ORLEANS.—S. V. Wardall, Pres., Nevada, Ia., informs us that 35 miles of way have been obtained and a survey run between Des Moines and Nevada, Ia. Capital for construction has been secured and the whole contract let. Sub-contracts are now being awarded. The proposed route is from Des Moines to Osage, via Nevada, Iowa Falls and Hampton, Ia., 140 miles. J. H. Larey, Ch. Engr., Nevada, Ia.

ERIE & WYOMING VALLEY.—Surveys have been begun on the spurs which are to connect this road with the collieries in the Wyoming Valley, which have signed contracts to ship their coal over the new route to tidewater via Lackawaxen, Pa. The work is being done under the general supervision of James Archibald. The company's offices are at Dunmore, Pa.

GUTHEIL PARK.—This company has been incorporated in Colorado with a capital stock of $10,000 to construct a short line of railway from the intersection of Hathaway and Colfax Sts., Denver, Colo., to Gutheil Park. F. J. Chamberlain, F. A. Joslin and A. H. Gutheil, of Denver, are promoters.

ILLINOIS CENTRAL.—Reconnoissance surveys have just been made, according to reports, for a projected connection between Sioux City, Ia., and Omaha, Neb., 90 miles, running over a new line to Loveland, 72 miles from Sioux City, and thence into Omaha over the Fort Dodge & Omaha branch. D. C. Dunlap, Supt. Construction, Lake City, Ia.

INDIA.—Press reports state that surveys are being made for the following railways: A branch of the Northwestern State Ry., 26 miles long, the Amritsar-Tarn

Taran-Sarhall, Campbell Thomson, Deputy Ch. Engr., Quetta, India; Malekwal-Lyallpur, to be built between the Chenab and Jhelum rivers, Jeck Doab, also for the Northwestern; Allahabad-Fyzabad chord, a part of the Oudh & Rohilkhand Ry., trans-Gogra, via Fyzabad to Allahabad, G. A. Campbell, Ch. Engr., Lucknow. The Bombay, will include a bridge over the Ganges River at above proposed lines are to be operated by the state. C. W. Hodson, Dir. Railway Construction, Sisula, India; Lt.-Col. W. H. White, Consult. Engr. for Railways, Calcutta. Alt-Kauch-Aurigah, to be a 38-mile feeder to the Cawnpore-Jhansi branch of the Indian Midland Ry., J. M. Wrench, Ch. Engr., Jhansi, India; Maj.-Gen. R. C. B. Pemberton, Royal Engrs., Mgr.-Dir., 13 Creswell Gardens, London, S. W., Eng.; Dholpore-Bari, also to be a branch of the Indian Midland, 21 miles long; Bagalkot-Hungund, to be a 25-mile branch for the Southern Mahratta Ry. Co., A. R. Anderson, Ch. Engr., Dharwar; Sir A. M. Rendel & Co., Consult. Engrs., 8 Great George St., S. W., London; Kalikiri-Royachoti, to be a 32-mile branch for the South Indian Ry., W. H. Spalding, Ch. Engr., Trichinopoly, India; Sir G. B. Bruce, Consult. Engr., 3 Victoria St., S. W., London; Sulem-Shevaroy, to be an 8-mile branch for the Madras Ry., in the Shevaroy Hills; E. W. Stoney, Ch. Engr., Madras; G. Noble Taylor, Chn. Bd. Dir., 3 Clarendon Place, W., London; Morappur-Dharmapuri, to be a 16-mile branch of the Madras Ry., which is also making surveys for the Tirupatur-Krishnagiri branch, to be 25 miles long. The Burma Rys. Co., Rangoon, is making surveys for the Kinu-Kabwet-Thabeitkyin branch, to serve the Kabwet coal mines, and for the Henzada-Myanoung line to extend along the right bank of the Irrawaddy of the proposed Tharrawaddy-Henzada-Basseim Ry., F. R. Bagley, Ch. Engr., Rangoon; Lt.-Col. A. G. Begbie, R. E., Mgr.-Dir., 239 Gresham House, E. C., London. The East Indian Ry. Co. is making surveys for making Port Canning, on the Mutlah River, a depot for the coal traffic; E. H. Stone, Ch. Engr., Calcutta; Sir A. M. Rendel & Co., Consult. Engrs., 8 Great George St., S. W., London. The Dacca State Ry., a part of the Eastern Bengal State system, will parallel the present line from Sherpur, via Netrakona to Kishoreganj, with a branch from Netrakona to connect at Mymensingh, and another from Dacca, west to a point on the Pudda River opposite Goalundo; T. W. Bartlett, Executive Engr.; G. Moyle, Ch. Engr., Sealdah, India. His Highness the Nizam of Hyderabad is having surveys made by Robt. N. Hodges, East Hopetown, Dehra Doon, N. W. P., for the Khandwa-Akola-Basim line; Herbert Groves, P. W. D., Mandalay, Burma, is making surveys for the Arsikeri-Hassen-Mangalore branch of the Mysore State Ry., as an outlet to the port of Mangalore on the Malaba coast. Additional information of these and other projected lines may be found in our issue of Aug. 24.

JACKSONVILLE & SOUTHWESTERN.—Geo. L. Davis, Ch. Engr., Jacksonville, Fla., informs us that this new road has been completed to Lake Butler, 54 miles. About 65 miles have been graded, and the location completed to Alachua. The route is from Jacksonville to Newberry, via Baldwin, Lake Butler and Alachua, Fla., 85 miles, and the company is building on its own capital. J. M. Barnett, Pres., Grand Rapids, Mich.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—The council of Minneapolis has granted extensive privileges to this company for terminal facilities which will cost about $100,000. Work will commence soon. Thos. E. Green, Ch. Engr.

MISSING LINK.—Surveys are now being made and rights of way being secured for this proposed line from Chattanooga, Tenn., to Walhalla, S. C., via Ringgold, Ga.; Cohutta Springs and Clayton, S. C., 150 miles. W. L. Albright, Pres., Blue Ridge, Ga.; Vanix Gibbs, Secy. and Treas., Mountain Scene, Ga.; J. H. Harrison, Ch. Engr.

NEBRASKA & GULF.—This company has been incorporated with a capital stock of $100,000 to construct a line from a point near Running Water, S. Dak., south into Nuckolls county, with projected extensions north to the Great Lakes and south to the Gulf of Mexico. Robert A. Batty, Pres., Hastings, Neb.; C. R. Rundall, Gen. Mgr., Wayne, Neb.

NEW YORK CENTRAL & HUDSON RIVER.—The stockholders of this company voted at a meeting at Albany, N. Y., Dec. 11, to increase its capital stock from $100,000,000 to $115,000,000. The equipments that the company will purchase with the increase will include 75 passenger coaches, 100 Rodgers' ballast, 2 Rodgers' standard distributing, 10,004 box, 500 flat, 6,000 coal and 250 flat steel cars, 98 mogul engines, 25 passenger engines and 27 Smith engines.

OHIO, TENNESSEE & CAROLINA.—This company has been incorporated in Tennessee with a capital stock of $10,000 to construct a line from Jellico, Tenn., through Knoxville to the North Carolina state line. William Kirby, Pres., Toledo, O.

OIL CITY, ROUSEVILLE & FRANKLIN.—A charter has been given this company, dated Dec. 14, to operate a line from Rouseville to Panther Run, in Venange county, Pa.; capital stock, $150,000. The incorporators are: D. J. Geary, Pres.; Wm. Hasson, P. C. Boyce, Oil City, Pa.

OKLAHOMA.—This company was granted a charter in Oklahoma Dec. 9. The capital stock is to be $5,000,000, and it is proposed to build from a point on the Chicago, Rock Island & Pacific Ry. between Enid and Okarche, Okla., to Coalgate, Ind. Ter., 300 miles. M. L. Turner, J. M. Owens and M. C. Milner, all of Oklahoma city, are directors.

PENCOYD & PHILADELPHIA.—This company was incorporated Dec. 15 to construct and operate a line in Montgomery and Philadelphia counties, Pa.; capital stock, $50,000. Percival Roberts, Jr., Lower Merion; P. W. Roberts and Charles C. Price, Philadelphia.

RICHMOND, PETERSBURG & CAROLINA.—Grading has been completed on this new railway of the Seaboard Air Line from Petersburg, Va., to Ridgeway, N. C. Work is being rushed on both sides of the James River, and it is expected to have trains running into Richmond by February. The new bridges on the line are being erected rapidly, and that over the Roanoke River is about completed. R. B. Seymour, Ch. Engr., Chamber of Commerce, Richmond.

PORT ANGELES EASTERN.—Contracts are about to be let, according to reports, for constructing this entire projected railway from Port Angeles to Olympia, Wash., 130 miles. Surveys have been made, and ten miles of grading has been completed. E. A. Cushing, Pres.; I. C. Atkinson, Gen. Mgr.; E. A. Fitzhenry, Ch. Engr., all of Port Angeles, Wash.

ST. LOUIS & NORTHERN ARKANSAS.—John Scullen, St. Louis, Mo., is reported to have the contract for constructing this proposed line from Eureka Springs to Harrison, Ark., 50 miles. Surveys have been completed, and Harrison has been asked for a $25,000 bonus. G. West, Mgr., Eureka Springs, Ark.

SAN ANTONIO & BROWNSVILLE.—L. J. Hart, Secy., San Antonio, Tex., informs us that a complete survey has been made and the right of way mostly secured for this proposed line from San Antonio to Brownsville, Tex., 275 miles. Bonds have been placed and the required bonus is being raised. The contract has been let to the Eagle Construction Co., Toledo, O. H. M. Aubrey, Pres., San Antonio; William Kennedy, Ch. Engr., Austin, Tex.

SALISBURY & HARVEY.—This 48-mile line of railway in New Brunswick is reported to have been sold to Alexander McElwee, of J. S. Way & Co., brokers, of New York. It is said that New York capitalists are interested in coal mining properties which lie along the road and that an extension will probably be built to Moncton, N. B. A. Sherwood, Gen. Mgr., Hillsborough, N. B.

SANTA FE & GRAND CANYON.—P. F. Randall, Ch. Engr., Williams, Ariz., informs us that this company has completed about 34 miles of grading on this new line being built from Williams north 75 miles to Grand Canyon; and it is expected to complete the next 10 or 12 miles to the mines before the winter closes. As soon as weather permits in the spring work will be continued to the Grand Canyon, near the Bright Angel trail. Richards & Son have the grading contract to the mines, and R. B. Coleman the contract for track-laying, which was under way 12 miles from Williams on Dec. 7 and was progressing at the rate of about three-fourths of a mile a day. Lombard, Goode & Co., 11 Broadway, New York, are the general contractors for the whole road, as stated in an official communication published in these columns Nov. 23. L. W. Goode, Pres.; R. L. Thomae, Treas., both of 11 Broadway, New York.

SIOUX CITY & NORTHERN.—This system is reported to have been sold at Sioux City, Ia., Dec. 12, on foreclosure, to Robert E. Tod and W. S. Tod, of J. Kennedy Tod & Co., New York, for $1,500,000. This line will be absorbed by the Great Northern Ry.

SWAN VALLEY & COLUMBIA.—This company has been granted an amendment to its charter whereby its capital stock is increased from $10,000 to $100,000, and a provision is made for the construction of a new line from the Nashville, Chattanooga & St. Louis R. R., where it crosses Swan Creek, Hickman county, to the Nashville & Decatur R. R., where it crosses Carter Creek, Maury county, Tenn.

TENNESSEE CENTRAL.—Reports state that a force of over 3,600 men is now engaged in grading and track-laying on this new road between Emory Gap and Monterey, Tenn., 60 miles. Most of the work is being done near Crab Orchard, between Rockwood and Crossville. A 1,000-ft. steel trestle has just been completed across the property of the Roane Iron Co. at Rockwood. Geo. T. Bigelow, Ch. Engr., Rockwood, Tenn.

UNADILLA VALLEY.—Bids are wanted by this company, 80 Broadway, New York, until Jan. 15 for furnishing about 12,000 oak and chestnut ties.

UNION CENTRAL.—The Atlas Construction Co., Wortham, Tex., is reported to have been awarded the contract for constructing 25 miles of this projected railway from Waco to Palestine, via Wortham and Fairfield, Tex., and from Paris to Houston, via Sulphur Springs, Canton and Montgomery, a total of 560 miles. Surveys have been completed for 35 miles. Cyrus Baldridge, Pres., Wortham.

WILKES-BARRE & HAZLETON.—This company was incorporated Dec. 13 with $270,000 capital stock to operate a line between Wilkes-Barre and Hazleton, Pa. John B. Price, H. O. T. Evans, Wm. C. Gallen and others, of Hazleton, are interested.

STREET AND ELECTRIC RAILWAYS.

GARDINER, ME.—The Gardiner St. Ry. Co. has been organized to build a 7-mile road to connect ward 6, which includes South Gardiner with the city proper; also lines about the city; $350,000 capital stock, all subscribed for. Freeman Patten, Charles Lawrence, John M. Turner.

BRISTOL, N. H.—Local papers state that it is proposed to run an electric line between the depot and the lake in this city. The charter of Bristol Electric R. R. may be used. Geo. A. Emerson is interested.

KEENE, N. H.—Plans for a railway from Keene to Brattleboro, Vt., by way of West Swanzey, etc., 26 miles, are being considered. A new bridge will be necessary over the Connecticut River.

EAST DOUGLAS, MASS.—A line is proposed from this place to Millbury, via Sutton, 10 miles. F. S. Coolidge, Fitchburg, is interested.

FREETOWN, MASS.—The Fall River & Brockton Air Line St. Ry. Co. has asked for a franchise to construct an electric road from Fall River to Buzzard's Bay.

HAVERHILL, MASS.—E. B. Fuller, Haverhill, writes us that all the capital stock has been subscribed and that petitions for locations in Methuen and Haverhill have been prepared and filed for the Haverhill & Southern New Hampshire St. Ry. Co. Surveys have not yet been made.

LEE, MASS.—The Central Berkshire St. Ry. Co. has been organized to construct an electric line from Lee to Lenox, with $50,000 capital. Wellington Smith, D. M. Wilcox and A. B. Clark are interested.

MENDON, MASS.—The Milford, Attleboro & Woonsocket St. Ry. Co. has asked the railroad commissioners for an issuance of $200,000 in bonds and permission to extend its line through Mendon to Hopedale. E. K. Ray, Pres., states that the line from Woonsocket to Milford will be constructed this winter.

NATICK, MASS.—The Boston & Worcester Electric St. Ry. has been granted a franchise to operate a line in this town, which will be connected with Boston. The company is negotiating for franchises in Worcester county.

NORTHAMPTON, MASS.—R. W. Irwin, attorney for the Northampton & Amherst St. Ry. Co., writes us that rails have been laid and wire strung to Amherst, about seven miles, equipment purchased and ready to be put in place as soon as the engines and generators are installed, which are now here. The hearing for right of way in Hatfield was held Dec. 6, and will probably be granted, but the construction will not commence until spring. The capital, $150,000, has been subscribed. F. E. Coolidge, Pres., Fitchburg.

WORCESTER, MASS.—The Southbridge & Charlton Depot St. Ry. Co. has been incorporated with $90,000 capital to construct a line from Southbridge to Charlton, nine miles. Edwin Phillips, Charlton; Chas. D. Harrington, of Southbridge; Wm. N. Howard, of Easton, and others are interested.

RYE, N. Y.—The highway commissioners have received an application from Frederick W. Sherman, of the Port Chester St. Ry. Co., for a franchise on the Boston Post Road from this village to Mamaroneck.——The "Huckleberry" system is negotiating for a line from Larchmont to Mamaroneck on the Boston Post Road.

JERSEY CITY, N. J.—David Young, Vice-Pres. North Jersey St. Ry. Co., writes us that the company will build the extension in Montclair.

PLAINFIELD, N. J.—The Plainfield St. Ry. Co. has accepted the franchise granted by the council for an extension in Middlesex county, and will commence work in the spring.

HARRISBURG, PA.—The Conestoga Traction Co. was granted a charter Dec. 13 by the state department. Wm. B. Given, Pres., Columbia; C. G. Engle, Treas., Columbia; J. D. Skiles, Lancaster.

MEDIA, PA.—Reports state that the Philadelphia & Delaware County trolley line will erect a power house on the grounds of the Media water-works to supply its proposed line to Rockdale with power.

MUNCY, PA.—J. W. Zeler, Lewisburg, has asked the council for a franchise for an electric line.

SHARON, PA.—Local papers state that an option has been taken on the Valley street railroad and electric light plant by Brown Bros., Baltimore, Md., with a view to extending the electric road to Youngstown, 14 miles distant.

STAUNTON, PA.—R. D. Apperson writes us that the City St. Car Co. proposes to build a new brick power house, 50 × 100 ft., and a car shed, 32 × 115 ft., both with steel truss roofs.

WILKINSBURG, PA.—Local papers state that a new electric line is proposed for this city, to be built by the Monongahela Traction Co., to connect with other lines. Work will be started at once, so as to have the road in operation by February. A bridge over the ravine back of Park Place will be necessary; estimated cost, $75,000.

BALTIMORE, MD.—The Patapsco Park Ry. has been granted a franchise for an electric line in the First District along the old Frederick road. Chas G. Hill and John Grason are attorneys for the company.

RICHMOND, VA.—It is reported that a syndicate proposes to construct a toll bridge over Elizabeth River, from Norfolk to Berkley, with facilities for an electric line, to be built through Berkley to the southern line of the Elizabeth River. Another structure will be built at Portsmouth. The line will be about 40 miles long, including other extensions. John D. Rockefeller, New York, and R. Lancaster Williams are interested.

CHARLESTON, S. C.—The Chattanooga, Augusta & Charleston Air Line Ry. was granted a franchise on Dec. 7 by council to operate a line on the streets in this city.

GREENVILLE, S. C.—Bids are asked until Jan. 4 by the National Gas & Construction Co., 112 North Broad St., Philadelphia, for a power house and equipment for the street railway and electric plant, as stated in our advertising columns.

ATLANTA, GA.—The Atlanta & Western Ry. & Power Co. has filed an application for a franchise. The same company has petitioned the county commissioners for an electric road from Atlanta to Douglasville, Austell and Marietta. Frank S. Monnett and M. B. Earhhardt are interested.

SAVANNAH, GA.—Local papers state that an electric railway to White Bluff is proposed. T. A. Richards is interested.

ALLIANCE, O.—The contract for building the Alliance, Sebring & Salem Electric Ry. is about to be let, according to reports. It is proposed to have all material on hand by spring. H. W. Klein, Pittsburg; Charles P. King, Philadelphia, and John W. Pittock, Marietta.

BELLBROOK, O.—Bids were received by J. S. Turner, Village Clk., on Dec. 20, for constructing and operating a street railway in this village, according to reports.

CLEVELAND, O.—The Aurora, Wheaton & Chicago Electric Ry. Co. has a 50-year franchise through Aurora, Wheaton and Glen Ellyn, and the right of way nearly secured. B. Mahler, Pres., Cleveland; M. J. Mandelbaum, Treas.

COLUMBUS, O.—We are informed that W. G. Wagenhals is the general manager of the Mill Creek Valley Electric Ry. Co., which has been granted a franchise to Lancaster, and not Wayeuhels, as incorrectly stated in our issue of Dec. 14. Judge D. Dwyer and O. B. Brown, the promoters of this line, are both from Dayton, not Detroit.——S. F. Secrest and Captain Houck, Chillicothe, are said to be interested in the new Chillicothe & Columbus Electric R. R., which is proposed, about 52 miles long. The line will make connections with other lines, and it is planned to begin work about Jan. 1, and to complete the road in three years.

COSHOCTON, O.—F. E. Pomerene, Secy., Columbus, Buckeye Lake & Newark Traction Co., writes us that the surveys for this company's electric line through Newark, Hebron, Kirksville, Etna, Reynoldsburg and Columbus, about 38 miles in length, have been made and most of the right of way obtained. The contract for the construction will be let within 30 days. Capital has been secured. M. Q. Baker, Pres.; W. A. Carlisle, Ch. Engr., Coshocton.

TOLEDO, O.—Plans are being prepared for building an addition to the Toledo Traction Co.'s power plant. A. E. Lang, Pres.

TROY, O.—The county commissioners have granted the Lima, Toledo & Cincinnati Ry. Co. a 25-year franchise for a line in Shelby county.

LAFAYETTE, IND.—The Lafayette Commercial Club has been petitioned for a franchise by an Eastern syndicate for an electric line to Frankfort.

MUNCIE, IND.—F. G. Brownell, 419 W. Jackson St., Muncie, writes us that all the franchises and most of the right of way for the Muncie Interurban Ry., from Muncie to Dunkirk, about 30 miles, have been secured, and that some work will probably be done this winter.

DETROIT, MICH.—Local papers state that 12 miles right of way for the Detroit, Lake Orion & Flint electric line, between Oxford and Flint, a distance of 32 miles, has been secured. The line will run in connection with the Detroit, Lake Orion & Romeo road.

GRAND RAPIDS, MICH.—I. J. Cilley, Grand Rapids, writes us that the right of way for the Grand Rapids, Spring Lake & Grand Haven Rapid Transit Co.'s electric line, extending from Grand Rapids to Grand Haven, about 32 miles in length, has been secured, and surveys will be completed soon.

HOUGHTON, MICH.—A franchise has been granted to Stone & Webster, P. O. Square, Boston, for a street railway in this place, and the construction will be started at once, according to reports.

COUNCIL BLUFFS, IA.—W. S. Dimmock, Gen. Mgr., Lake Manawa & Manhattan Beach R. R. Co., writes us that surveys have been made and right of way secured for this electric line, which will extend from Council Bluffs to Lake Manawa and Manhattan Beach, a distance of 4 miles. The contract for construction will be let in about 15 days. N. W. Wells, Pres., and W. S. Dimmock, Gen. Mgr., will be in Chicago during the first week in January to make all purchases for the line, including rails, ties, machinery, etc.

MINERAL POINT, IA.—Local papers state that surveys have been completed for the Mineral Point & Northern Electric Ry. from Mineral Point to Highland, Wis., about 23 miles, and that grading will be started in the spring. L. F. Dickarson, Pres., Chicago; Richard Kennedy, Vice-Pres., Highland; Chas. W. McIlhon, Attorney, Mineral Point.

LAWRENCE, KAN.—A. Monroe, Pres. Commercial Club, writes us that little work has been accomplished on the abandoned Carbondale road, recently purchased by Willard E. Winner, Kansas City, Mo. It is proposed to connect the line with Kansas City, Bonner Springs, Lawrence, Topeka and Osage or Carbondale. A franchise in Lawrence has been obtained and some grading has been done. Several franchises have been secured in Missouri and Kansas. It is proposed to issue bonds to meet the expense of the project.

TACOMA, WASH.—General Manager Bucey states that work on the Tacoma-Seattle Electric Ry. will begin at once. A steel bridge will be erected across the Puyallup River next spring; estimated to cost $25,000.

COLORADO SPRINGS, COLO.—A franchise has been applied for by C. M. Coleman to build a street railway to the northeast side of the city.

DENVER, COLO.—The Denver, Boulder & Northern Ry. Co. has been incorporated with $2,500,000 capital. H. J. Mayham, Denver, and T. F. Mundy, Lincoln, Ill., are interested. The power will be supplied by the Denver City Light & Power Co., recently incorporated.

SALINAS, CAL.—Bids are asked until Jan. 15 for the purchase of a street railway franchise in this town. F. A. Abbott, City Clk. The Salinas Ry. Co. has made application for this franchise.

SAN JOSE, CAL.—C. M. Hatcher, Secy. San Jose & Alviso R. R. Co., writes us that ¾ of the right of way has been obtained and the capital secured for the line, which will extend from San Jose to Alviso, 12 miles. Contracts will be let in 60 days. Terminals and city franchises have been secured. A. Greeninger, Pres.; Hugh Center, Ch. Engr., San Jose.

HAMILTON, ONT.—The finance committee on Dec. 7 granted the proposed Guelph & Galt Electric Ry. the right of way. City Engineer Wingate has recommended a change of route by the company, and also that a bonus of $25,000 be granted by the city.

SARNIA, ONT.—The Sarnia St. Ry., through Frank Smith, has asked the committee for a franchise.

ENGLAND.—The following electric railway work is proposed: Municipal line in Bournemouth; F. W. Lacey, Surv. Burnley town council recently secured control of tramways, proposes to reconstruct and extend; estimated cost, about $750,000; W. R. Wright, Elec. Engr. The Glasgow Districts Tramways Co., Glasgow, Scotland; the Corporation and the British Electric Traction Co., London, have applied for permission to build in the counties of Dumbarton and Penfrew. The Warrington town council proposes to spend about $750,000 for a line; J. E. Wright, Mayor; T. Longdin, Surv. The Liverpool council proposes to spend about $2,000,000 for extensions and equipment of the lines of the Liverpool Tramways with electricity. There are about 79 miles of line, over half of which is operated by horse power. C. R. Bellamy, Mgr.; J. A. Brodie, Cy. Engr. The following companies and corporations have applied for extensions, etc.: Middleton, Wm. Welburn, Surv.; Bedford, John Lund, Surv.; Leamington & Warwick Tramways & Omnibus Co., Ltd., G. E. Truswell, Mgr., Warwick; Wigan, Wm. Bolton, Surv.; Taunton, West & Somerset Ry. & Tramway Co., Taunton; Southampton, F. H. Chaplin, Elec. Engr.; Bootle, J. A. Crowther, Engr.; St. Helens, G. J. C. Broom, Surv.; Garston & District Tramways Co., Ltd., Garston; Plymouth, C. R. Everson, Tramways Mgr.; Hull, A. S. Barnard, Elec. Engr.; Surbiton, Sam'l Mather, Surv.; Kingston-upon-Thames, J. E. Edgecombe, Elec. Engr.; Ryde, C. Mathew, Surv.; Ashton-under-Lyne, J. T. Ernshaw, Surv.; Bath, Alfred Mitchell, Cy. Engr.; Hartlepool Electric Tramways Co., Ltd., H. S. Hodgson, Mgr., Hartlepool. A number of other corporations and private companies have either asked for permission to build, equip with electricity or extend.

GLASGOW, SCOTLAND.—Bids are asked until Jan. 6 for supplying and erecting a cast-iron cable tunnel, water storage tanks, traveling cranes, mechanical stokers, coal and ash conveyors and steel flues for the electric railway. Draft of two guineas required for specifications. John Young, Gen. Mgr.

BERLIN, GERMANY.—Press reports state that the Province of Brandenburg will soon issue about $2,880,000 for the construction of subsidiary railways, and that this city will build underground railways. Address the Minister of Public Works, 79 Wilhelmstrasse, Berlin.

NAPLES, ITALY.—The Societa Napolitana per Imprese Elettrichi has been incorporated to build an electric plant in Naples, and to build and operate a railway between Dronero, Savigliano and Bia (Piedmont). Capital stock, $600,000.

SALERNO, ITALY.—Press reports state that plans for an electric line between Salerno and Cava have been submitted to the Ministry of Public Works, Rome.

CAPE TOWN, CAPE OF GOOD HOPE, S. A.—Press reports state that the government has granted the Mills syndicate permission to build electric lines in the city and to Camp's Bay, Greenpoint and Seapoint. It is thought that these lines, when built, will be consolidated with the Cape Town Tramways Co., which controls all the lines of the city, about 30 miles long. The company is controlled by Wernher, Beit & Co., 120 Bishopsgate St., London. J. E. Lloyd, Mgr., Cape Town.

ELECTRIC LIGHT AND POWER.

PATTEN, ME.—This town will soon erect its own lighting plant.

VAN BUREN, ME.—This town contemplates having a system of electric lights.

ENFIELD, N. H.—The plant at this place, located in the Baltic Mills, was destroyed by fire Dec. 10, causing a loss, with the mill, etc., of about $80,000. Geo. E. Whitney, Mgr.

ENFIELD, CONN.—The Enfield Electric Light & Power Co. proposes to extend its plant, at a cost of about $12,000.

HARTFORD, CONN.—I. H. Wadham, Asst. Clk. to Controller, writes us that the matter of lighting the capital with electricity has been abandoned for the present.

HORSEHEADS, N. Y.—The question of a municipal plant is reported as being considered. S. M. Wheeler, Consult. Engr., Addison, N. Y.

SAG HARBOR (L. I.), N. Y.—It is reported that Robt. K. Story, Pres. Artesian Well Drilling Co., 44 Centre St., New York, will begin work at once on the proposed plant. The contract for the poles is said to have been let to H. B. Pape.

JERSEY CITY, N. J.—The following bids for a plant in the Public Library Building were received Dec. 13: E. Heaton, New York, Sec. 1, $16,500; Sec. 2, $4,300. G. A. Williams & Co., Jersey City, Sec. 1, $10,775; Sec. 2, $2,220. Zimdars & Hunt, New York, Sec. 1, $10,174; Sec. 2, $2,100. New York Electric Equipment Co., Sec. 1, $8,758; Sec. 2, $2,096.

BOYERSTOWN, PA.—The council is reported as considering a proposition for a plant.

CORRY, PA.—Geo. D. Gilbert, Cy. Engr., writes us that this city wants to let a contract for furnishing 80 arc lights for 10 years.

PITTSBURG, PA.—Bids are asked until 10 a. m. Dec. 23 for furnishing this city with electric or gas lights for four years from Jan. 1. Edward M. Bigelow, Dir. Dept.

SCRANTON, PA.—Councilman Thos. O'Boyle has introduced an ordinance authorizing the city clerk to ask for bids for furnishing this city with electric lights for ten years.

FROSTBURG, MD.—The council is arranging to sell $20,000 in bonds for a plant, according to reports.

HAMPTON, VA.—Plans have been completed for a city plant to cost about $30,000, according to reports.

NORFOLK, VA.—The Norfolk Ry. & Light Co. has purchased land for its proposed new power plant. This company and the Norfolk Heat, Light & Power Co. have submitted bids for electric lighting.

SUFFOLK, VA.—The council, it is stated, has asked for bids for electric lighting. The present contract with the Suffolk Light & Water Co. expires in January.

DUNN, N. C.—It is reported that John F. Wiley and B. N. Duke, Durham, N. C., propose to build a plant to develop the power at Smiley Falls, Harnett county, where it is also proposed to build a cotton mill to cost about $400,000.

GREENVILLE, S. C.—Bids are asked by the National Gas & Construction Co., 112 North Broad St., Philadelphia, Pa., until Jan. 4, for a brick power house for electric lighting and a street railway, together with equipment, etc., as stated in our advertising columns.

TOCCOA, GA.—E. P. Simpson is reported to have been granted a franchise for a plant, water-works and a street railway.

GREENSBORO, ALA.—Jas. E. Webb, Birmingham, Ala., who is said to have bought the water-works, is reported to have received a contract for erecting a plant.

GURLEY, ALA.—It is proposed to build a plant to cost about $25,000, and a telephone system.

JACKSON, ALA.—M. T. White, Mobile, Ala., is reported as preparing estimates for a plant and water-works for this place.

BAY ST. LOUIS, MISS.—Richard Mendes, Secy. City Council, writes us that Braun & Beecher, of this city, have been awarded the contract to light this town for five years. The plant will furnish incandescent lights, on the Cutter-Crane system, and work is to be begun about Jan. 1.

NICHOLASVILLE, KY.—J. D. Young, Clk., writes us that it is not likely that the new board will take any action regarding the proposed plant until 1900.

CLEVELAND, O.—The council committee, it is stated by local papers, will soon report on the matter of a municipal plant. It is estimated that a plant can be built by the city for about $2,000,000. Councilmen Hoffner and Lappare are on the committee.

LOWELLVILLE, O.—Arrangements are reported as about completed for a plant to cost $8,000. W. D. McCombs, Pres. Council; J. H. McWilliams, Clk.

TOLEDO, O.—The Consolidated Electric Co. has received the contract for lighting the city at $83 a lamp.

ALBION, MICH.—The question of issuing bonds for a plant, it is stated, will soon be voted upon. A franchise was recently granted to E. M. Lombard & Co., but, it is said, cannot be contracted for.

SAGINAW, MICH.—We are informed that the matter of a city plant is still in the hands of the committee, but that it will soon submit a report. The question will be submitted to a vote of the people.

CHICAGO, ILL.—City Electrician Ellicott is urging the finance committee to appropriate $250,000 for extending the plant.

SHEBOYGAN, WIS.—E. L. Debell, Secy. Sheboygan Light, Power & Ry. Co., writes us that it is proposed to erect a new one-story power station next spring. Details have not yet been made, nor is it decided whether to move the entire plant into the new building, or to retain the first story of the present station as an engine room. The company will first consult engineers as to the best methods to pursue, and will then have the plans, specifications and bids prepared. The new station will operate electric light, motor power, and city and interurban railway system.

AUBURN, NEB.—J. C. Killarney, Chn. Com., writes us that nothing definite regarding a plant has been done, as the bond limit, $5,000, is so small. The town may grant a franchise, permit the builder to bond the plant and then the town vote to assume the indebtedness.

DEADWOOD, S. DAK.—C. H. Cornell, of Valentine, Neb., is reported as organizing a company to build a water power plant on the Niobrara River, to develop 10,000 HP.

WICHITA, KAN.—The street railway, etc., belonging to the Batchelder syndicate, of New Hampshire, has been sold to W. B. McKinley, of Illinois, representing a Portland, Me., company, who, it is stated, will at once spend about $100,000 in improving the power plant, etc.

INDEPENDENCE, MO.—S. H. Woodson, Mayor, writes us that a committee has so far only been appointed to investigate the question of a municipal plant.

ST. LOUIS, MO.—The mayor has signed the city lighting bill. Bids will soon be asked.

CALDWELL, TEX.—A company is reported as being organized to build a plant.

DENVER, COLO.—Mayor Johnson has suggested that a company build a plant and then sell it to the city. A plant will cost about $265,000, exclusive of the land.—The Denver City Light & Power Co., recently incorporated, proposes to build a plant at once to cost about $1,000,000. The plant will be at the Denver City Coal Mines, near Lafayette, and about 10,000 HP. will be developed. H. J. Mayhem, of Denver, and J. F. Mundy, of Lincoln, Ill., are interested.

LONG BEACH, CAL.—C. I. Goucher, Cy. Engr., writes us that plans have been adopted for a plant, and an election to vote on the question of issuing $32,000 in bonds has been called.

OAKLAND, CAL.—Bids are asked until Feb. 5 for a franchise for lighting in Contra Costa county. J. E. Rodgers, County Clk.

RIVERSIDE, CAL.—E. F. Kingman, Chn. Com., writes us that the city board of trustees has ordered the city attorney to take steps necessary towards calling an election to vote on the question of issuing $38,000 in bonds for an auxiliary plant.

SALT LAKE CITY, UTAH.—It is reported that a local company is being organized to build a plant, to cost about $100,000, to furnish power to the mines of State Line, Deer Lodge and Pike's Diggings.

WEISER, IDAHO.—E. Cannon, of the Northwest Electric Co., is reported to have submitted a proposition to put in a plant and water-works. Messrs. Butterfield, Kimball and Lockwood, of the Board of Trade, are investigating the matter.

MEXICO, MEX.—The Compania Mexicana de Fuerza Motrix is said to have been organized to build a power plant at the falls of the Rio Blanco, Vera Cruz. A number of concerns from the United States will locate near the falls where the power will be transmitted.

BRACEBRIDGE, ONT.—We are informed that bids for the proposed plant will be wanted in January. It will have a capacity of 300 to 450 K-W., will be operated by water power, and will cost about $25,000. The people will vote on the by-law Jan. 1. C. H. Mitchell, Des. Engr., Niagara Falls, Ont.

PEMBROKE, ONT.—An election will be held Jan. 1 to vote on the question of issuing $30,000 in bonds for a plant.

THAMESVILLE, ONT.—E. S. Hubbell, Reeve, writes us that this place mill vote Jan. 1 on the question of purchasing the plant from Geo. Munroe for $5,000.

MONTREAL, QUE.—Press reports state that the Royal Electric Light Co. has secured control of the Chambly Power Co., which supplies the lights, for $485,000. R. Forget, Pres. Chambly Power Co.

VICTORIA, B. C.—Fred. Peters writes that the proposed tidewater power scheme at Vancouver is not far enough advanced to give any definite information at present.

COLON, COLOMBIA.—Reports state that the Colon Electric Illuminating Co. has begun the construction of its plant, for which a 25-year franchise has been granted. The company will furnish power to the Panama R. R. Co., the government and the city. G. R. Tuska, Ch. Engr., Panama R. R. Co., 29 Broadway, New York.

ENGLAND.—The following towns propose to put in new plants or extend the present ones: Hastings, to cost about $180,000, P. H. Palmer, Engr.; Sheffield, $750,000, C. F. Wike, Cy. Surv.; Wrexham, $100,000, J. W. M. Smith, Surv.; Hackney, London, $250,000, J. Lovegrove, Surv.; Wimbledon, $100,000, C. H. Cooper, Surv.; Morecambe, $125,000; William Tilly, Clk.; Harrogate, $120,000, Geo. Wilkinson, Elec. Engr.; Dublin (Ireland), $375,000, Spencer Harty, Surv.

CANGAS DE ONIS, SPAIN.—The Sociedad Electro-Cangesa is reported to have been formed to build a power plant on the Arrudas River, to cost about $125,000.

NEW COMPANIES.—Wyoming Light & Power Co., East Orange, N. J.; $175,000; J. S. Garvin, F. C. Smith, E. B. Hawkins.

Rensselaer Lighting Co., Rensselaer, N. Y.; $50,000; J. T. Kirk, Brooklyn; L. B. Lampmann, Coxackie.

American Power Transmission Co., New York, N. Y.; $500,000; E. F. Perry, A. S. Fisher, S. A. Bennett.

Dickinson Electric Light & Power Co., Dickinson, S. D.; $10,000; A. T. Crowl, F. Kihm, F. Lish.

Martel Power Co., San Francisco, Cal.; $100,000; A. F. Martel, E. F. Sagar, A. I. Black.

Columbus Electric Light Co., Jersey City, N. J.; $800,000; Charles N. King, York and Washington Sts., Jersey City; John J. Mulvaney, Albert McMahon.

Peoples' Electric Co., Boise, Idaho; $100,000; Chas. Bannister, Ogden; Alfred Eoff, Boise.

Indiana Water & Light Co., Worthington, Ind.; $10,000; F. C. Spring, J. G. Search, F. L. Harris.

Sing Sing Lighting Co., Sing Sing, N. Y.; $50,000; J. T. Kirk, B. F. Williams, Brooklyn; L. B. Lampman, Coxsackie.

Hampton Roads Development Co., Portsmouth, Va.; $50,000; to build a plant, electric road, etc.; T. W. Shelton, Pres.; H. Kern, V.-Pres.; C. M. Randolph, Secy.

Lamar Light & Water Co., Lamar, Mo.; $60,000; A. L. White, M. E. Davis, T. J. Lites.

San Pedro & Terminal Gas, Electric & Power Co., San Pedro, Cal.; $100,000; Fred. H. Rindge, H. V. Carter, Geo. Cochran.

Tampa Electric Co., Tallahassee, Fla.; $500,000; Geo. J. Baldwin, Peter O. Knight, H. G. Bradice.

Essex Fells Light & Water Co., Newark, N. J.; $10,000, with $1,000 paid in; Henry Wendell, Fred. H. Treat, Wayne, Pa.; Chas. A. Maule, Essex Fells.

BRIDGES.

BOSTON, MASS.—Plans for the new Cambridge bridge have been passed upon by the Cambridge Bridge Commission and forwarded to the War Department for approval. The new structure will be of stone and steel, with ten spans and two draws.

NEW LONDON, CONN.—L. E. Darball, Cy. Engr., writes us that no definite steps have been taken towards the construction of the proposed bridge over the Consolidated tracks from Bank St. to the Groton Ferry.

ALBANY, N. Y.—The council has passed the resolution appropriating $7,000 for repairing the city's viaducts.

FORT HUNTER, N. Y.—The question of erecting a free bridge is being considered by the board of supervisors.

FULTON, N. Y.—Supervisors J. W. Distin and E. F. Palmer, of the towns of Volney and Granby, have been appointed to consult with State Engineer Bond in relation to the construction of a new bridge over the Oswego River from Oneida St., Fulton to North St., Oswego Falls. The new structure will be 700 ft. long, and will cost about $50,000.

CRANFORD, N. J.—Sketches of the proposed bridge to be erected on South Ave. to span the Baltimore & Ohio R. R. crossing, by the Riker trolley line, have been submitted by C. Vreeland, Township Engr., to the township committee. The structure will be 21 ft. high, 18 ft. wide, and will extend 300 ft. on either side of the tracks.

CHESTER, PA.—Bids are asked by the county commissioners, according to reports, until Dec. 21 for the masonry for a new bridge over Chester Creek, near Glen Riddle Station.

LITTLE BRITAIN, PA.—Estimates will soon be required for the structural work on the proposed concrete and steel bridge to span the Octorara Creek, according to reports.

PHILADELPHIA, PA.—Reports state that the Illinois Central R. R. will build 23 new steel bridges between Carbondale and Cairo to replace the present structures.

SMITHTON, PA.—The following bids were received by the county commissioners on Dec. 14 for constructing a steel bridge over the Youghiogheny River, to be about 133 ft. long, with an 18-ft. roadway: Bellefontaine Bridge Co., $62,250; Berlin Bridge & Iron Co., $62,990; Brackett Bridge Co., $61,700; Champion Bridge Co., $61,000; Groton Bridge Co., $60,500; Havana Bridge Co., $63,200; Iron Substructure Co., $62,600; King Bridge Co., $59,200; Lafayette Bridge Co., $62,711; Mt. Vernon Bridge Co., $62,002; New Castle Bridge Co., $68,700; New Columbus Bridge Co., $61,500; Penn Bridge Co., $59,250; Pittsburg Bridge Co., $59,500 (accepted); Toledo Bridge Co., $59,400; Wrought Iron Bridge Co., $59,900; Youngstown Bridge Co., $63,450. Our correspondent informs us that the report in local papers stating that the Shiffler Bridge Works had received the contract was a mistake.

WASHINGTON, D. C.—The directors of the Washington Traction & Electric Co. have authorized an expenditure of about $250,000 for replacing seven single-track wooden bridges by double-track steel structures along the Great Falls line.

ATLANTA, GA.—A bill has been passed to authorize the council of Macon to contract for the construction of a bridge across the Ocmulgee River at Fifth St.

DAYTON, O.—F. M. Turner, Cy. Engr., writes us that nothing will be done toward the construction of the Lehman St. bridge until the Germantown Traction Co. is granted a franchise, which is as yet uncertain.

CRAWFORDSVILLE, IND.—Bids are wanted by the county auditor until Dec. 23 for the superstructure of a bridge over Black Creek, with three spans of 35, 40 and 180 ft. Jas. A. Harding, Des. Engr., Crawfordsville.

GRAND RAPIDS, MICH.—Geo. M. Ames, Cy. Engr., has submitted the following estimates as to the cost of bridges to be constructed at Bridge St: Concrete steel arch bridge, 590 ft. long, 46-ft. roadway, brick 10-ft. sidewalks, concrete, five spans over main channel, $170,830; steel girder bridge, steel floor system, brick pavement, 44-ft. roadway, 10-ft. sidewalks, six spans of 80 ft., quarry stone faced piers and abutments, $173,550; same with concrete piers and abutments, $171,450.

PORT HURON, MICH.—It is reported that an election will be held on Jan. 16 to vote on the question of issuing bonds for the construction of bridges and other improvements.

ST. JOSEPH, MICH.—We are informed that no definite steps have as yet been taken toward the construction of the proposed wagon bridge. The structure will have a steel swing span 200 ft. long, with trestle approaches of 50 ft. each; the pivots and end piers to be of stone on piling. It is proposed to use standard railroad loading so the bridge may be used by the electric railway. The structure will be built providing the city can obtain assistance from parties on the north side of the river; estimated cost, $400,000.

CHICAGO, ILL.—Bids are asked until Dec. 23 for repairing Canal and 16th St. and Halstead and 16th St. viaducts. L. E. McGann, Comr. Pub. Wks.——L. E. McGann, Comr. Pub. Wks., is planning to replace all the old bridges across the Illinois and Michigan Canal and the west fork of the south branch of the river, instead of building new ones.——The Burlington and Northwestern railway companies have entered into an agreement with the city to construct the Canal St. viaduct over their tracks in 16th St., to cost about $75,000, of which the city will pay $22,500.

PEORIA, ILL.—The question of building a viaduct over the tracks at the foot of Chestnut St. is being considered.

PONTIAC, ILL.—The following bids were received by Fred. G. White, Cy. Clk., 302 Sterry Block, on Dec. 12, for rebuilding the Vermillion St. bridge, as advertised in Engineering News: Western Bridge Co., Chicago, Ill., $2,870; Indiana Bridge Co., Lincoln, Ill., $2,975; Massillon Bridge Co., Massillon, O., $2,494 (accepted); King Bridge Co., Bloomington, Ill., $2,994; Joliet Bridge & Iron Co., Joliet, Ill., $2,705; Adams & Co., Indianapolis, Ind., $3,500.

ROCKFORD, ILL.—Edwin Main, Cy. Engr., writes us that the date for receiving bids for constructing a girder bridge over Kent Creek on N. State St., to be 54 ft. long, has not yet been fixed; estimated cost, $5,500.

MONTEZUMA, IA.—Bids are asked until Jan. 2, according to reports, for the construction and repair of bridges in Poweshiek county during 1900. Alex. Duffus, County Audr.

ANACONDA, MONT.—The contract for constructing a steel bridge across the Big Blackfoot River at the mouth of Lincoln Canyon has been let by the county commissioners to the Pueblo Bridge Co., Pueblo, Colo., at $3,000.

ST. LOUIS, MO.—The question of constructing a third bridge over the Mississippi River at this place is being considered. Permission will be asked of Congress to make the improvement.

MALVERN, ARK.—Bids will be asked by the bridge commissioners, upon the completion of plans and specifications, for a bridge over the Ouachita River. D. S. McCray, Comr., may be addressed.

HOQUIAM, WASH.—The following bids have been received by the county commissioners for constructing a Howe truss drawbridge, with a 280-ft. draw: Northwest Bridge Co., Tacoma, $12,300; Puget Sound Dredging Co., Seattle, $13,000; Pacific Bridge Co., Portland, $11,840; Douglas Bros., Aberdeen, $9,177 (accepted).

SAN BERNARDINO, CAL.—The supervisors have accepted the plans and specifications for a bridge across Redlands storm water drain, and will ask for bids for its construction, according to reports.

SAN JUAN, P. R.—Edwin Thacher, Savings Institution Bldg., Paterson, N. J., has been awarded the contracts by Capt. Wm. V. Judson, U. S. Engr., Pres. Bd. Pub. Wks. for P. R., for two concrete-steel bridges, to cost about $86,000. They are for the military road from San Juan to Ponce, one over the Jacaquas River at Juana Dias, 404 ft. long, and the other over the Guayo River, near Ponce, 270 ft. long. Both are expected to be completed by Aug. 1.

BUILDINGS.

BOSTON, MASS.—Plans have been prepared for a stable on Chelsea St., E. B., for the street department. B. W. Wells, Supt.——The plans of Wilson & Webber, 70 Kilby St., for the new school house on Parker St., Roxbury.——It is stated that the Woman's Club will erect a 4-story clubhouse on Beacon Hill to cost about $75,000. Mrs. W. W. Potter, Pres. Tremont Bldg.

BOSTON, MASS.—Bids are asked until Dec. 22 for installing a plumbing system in East Boston High School; check, $1,000. E. I. Aldrich, Chn. Bldg. Com.

CAMBRIDGE, MASS.—Reports state that the Charles River Embankment Co., B. D. Hyde, Pres., is having plans for an apartment house, to cost about $750,000, by H. B. Ball, 2 Park St.

WESTFELD, MASS.—Mace Moulton, Consult. Engr., Springfield, Mass., writes us that he has had the contract for the 3-story hotel for J. C. Buschmann, mentioned in last week's issue, for about two months.

NEW HAVEN, CONN.—It is stated that the school board will ask for plans for a 2-story brick school house at Livingston and Canner Sts., to cost about $45,000.

BUFFALO, N. Y.—The building committee of the Pan-American Exposition has accepted the plans of Howard, Cauldwell & Morgan, 10 E. 23d St., New York, for an electric tower 300 ft. high.

NEW YORK, N. Y.—Bids are asked by the Department of Public Charities, foot E. 26th St., until Dec. 26, for installing a passenger elevator and two dumb-waiters in the Metropolitan Hospital, Blackwell's Island; by the Health Department, 55th St. and 6th Ave., until Dec. 27, for a pavilion at the Kingston Ave. Hospital, Brooklyn; and by the Park Department, Arsenal, Central Park, until Dec. 28, for furnishing various building supplies in Brooklyn.

NEW YORK, N. Y.—It is stated that Col. J. J. Astor will erect a 10-story apartment house at 55th St. and 5th Ave., to cost about $1,000,000.——The Metropolitan St. Ry. Co. will build a 4-story brick car house at 54th St. and 9th Ave., to cost about $250,000. A. V. Porter, Arch., 621 Broadway.——Plans are reported to have been prepared for a 17-story apartment house at 44th St. and 5th Ave., which will have a tunnel under the avenue to Sherry's.

NEW YORK, N. Y.—Plans have been filed by A. M. Janpole and L. Werner, 206 Broadway, for four 6-story brick flats at 101st St. and First Ave., to cost about $106,000. G. F. Pelham, Arch., 503 Fifth Ave.; by B. A. Klein, 125 East 120th St., for a 7-story apartment house at 75th St. and First Ave., to cost about $50,000; for a 6-story brick flat at 2d St. and First Ave., to cost about $60,000; for a 6-story tenement house at 1st St., near First Ave., to cost about $40,000, and for three 6-story brick flats at 1st St., near First Ave., to cost about $112,000. G. F. Pelham, Arch. for all, 503 Fifth Ave.; by Lowenfeld & Prager, 115 Broadway, for two 6-story flats at 62d St., near Second Ave., to cost about $48,000. G. F. Pelham, Arch., 503 Fifth Ave.; by C. F. Rogers, 1663 Amsterdam Ave., for a 7-story brick flat at 143d St. and Hamilton Place, to cost about $180,000. Hy. Anderson, Arch., 330 Madison Ave.; by Alois Gutwillig, 47 Cedar St., for two 7-story flats at Central Park West, near 100th St., to cost about $160,000. Neville & Bagge, Archs., 217 West 125th St.; by the Metropolitan Street Ry. Co., for a 4-story brick car-house at 54th St. and Ninth Ave., to cost about $350,000. A. V. Porter, Arch., 621 Broadway; by L. Huther, 35 Nassau St., for ten 5-story brick flats at 136th St., near Brook Ave., to cost about $230,000. Schneider & Herter, Archs., Bible House; by J. J. Honlahan, 39 Nassau St., for seven 5-story brick flats at 63d St. and Second Ave., to cost about $161,000. Schneider & Herter, Archs., Bible House; by A. Silverman, 236 E. 61st St., for two 7-story brick flats at 243 to 247 E. 13th St., to cost about $100,000. Schneider & Herter, Archs., Bible House; by Guidette & Aliani, 23 Marion St., for two 6-story brick flats at 23 and 25 Marion St., to cost about $40,000. A. G. Rechlin, Arch.; by A Schlesinger, 60 Rivington St., for two 6-story brick flats at 143 to 147 Chrystie St., to cost about $55,000. Horenburger & Straub, Archs., 122 Bowery; by W. W. Astor, London, England, for an 8-story apartment house at Broadway and 75th St., to cost about $400,000. Clinton & Russell, Archs., 32 Nassau St.; by Realty Improvement Co., for two 5-story brick flats at 90th St. and West End Ave., and two at 91st St. and West End Ave., to cost about $100,000. Hugh Lamb, Arch., 35 Nassau St.; by Jacob Pizer, 123 E. 65th St., for two 6-story brick tenements at 279 and 281 Monroe St., to cost about $48,000. G. F. Pelham, Arch., 503 5th Ave.; by Lowenfeld & Prager, 115 Broadway, for three 6-story brick flats at 5th St., near Ave. D, to cost about $78,000. G. F. Pelham, Arch., 503 Fifth Ave.; by Leo Wise, 338 E. 59th St., for a 10-story business building at Fifth Ave. and 16th St., to cost about $300,000. Louis Korn, Arch., 37 Maiden Lane; by Rachel Aronson, 73 Bayard St., for two 6-story brick flats at Bayard and Mott Sts., to cost about $60,000. Schneider & Herter, Bible House; by J. L. Miller, 128 Riverside Drive, for a 7-story apartment house at 126 Riverside Drive, to cost about $50,000. Julius Munckwitz, Arch., 247 W. 125th St.; by Jos. Solomon, 237 Mercer St., for two 6-story flats, at 195 and 197 Allen St., to cost about $40,000. N. Langer, Arch., 9 Catharine St.; by the City of New York, for a 3-story brick dormitory on Randall's Island, to cost about $40,000. Horgan & Slattery, Archs., 1 Madison Ave.; by P. Wagner, 215 W. 106th St., for five 5-story dwellinghouses at 106th St., near Riverside Drive, to cost about $88,000. Hy. Anderson, Arch., 330 Madison Ave.; by Lowenfeld & Prager, 115 Broadway, for two 6-story brick flats at 5 to 9 Goerck St., to cost about $52,000. G. F. Pelham, Arch., 503 Fifth Ave.; by E. Kempner, for two 6-story brick flats at 157 to 161 Allen St., to cost about $60,500. G. F. Pelham, Arch.; by Jackson & Stern, 31 Nassau St., for two 6-story brick flats, to cost about $48,000. M. Bernstein, Arch., 245 Broadway; by Catharine M. Matthews for two 4-story flats at 136th St., near Willow Ave., to cost about $40,000. W. Cunningham, Arch., 156th St., near Third Ave.; by E. Kempner, 55 E. 61st St., for two 6-story brick flats at Bank St., near Bleecker, to cost about $50,000. G. F. Pelham, Arch.; by J. P. Leo, owner and architect, 143 W. 125th St., for a 6-story frame flat at 146th St., near Amsterdam av., to cost about $40,000; by Makrowsky, 1015 Third Ave., for two 7-story brick flats at 451 to 455 Grand St., to cost about $70,000. M. Bernstein, Arch., 245 B'way.——It is stated that I. A. Hopper & Son, 219 W. 125th St., have been awarded the contract for erecting the 4 and 5-story asylum buildings at 189th St. and Sedgwick Ave., to cost about $500,000, for the Roman Catholic Orphan Asylum, 461 Madison Ave.; Shickel & Ditmars, Archs., 111 Fifth Ave.——The following bids for addition to present Pavilion "F" on Randall's Island were received Dec. 18, by the department of charities: P. K. Lontey, 206 East 50th St., $40,346; Hartmann & Horgan, 287 4th Ave., $44,666; Williams & Gerstle, New York, $46,445; J. H. Goetschius, 539 Hudson St., $46,847; Charles Scheidecker 556 W. 170th St., $46,974; McQuaid & Mahony, 1298 Lexington Ave., $49,700.

NEW YORK, N. Y.—Plans have been filed by D. Finelite, 864 Lexington Ave., for a 7-story brick flat, at Park Row and Baxter St., to cost about $80,000. W. H. Boylan, Arch.; by Robert Smith, for a 5-story brick flat at 342 and 344 W. 30th St., to cost about $40,000. G. F. Pelham, Arch.; by L. Werner, 206 Broadway, for nine 6-story brick flats at 101st St., near First Ave., to cost about $243,000. G. F. Pelham, Arch.; by J. J. Mahony, 51 W. 94th St., for six 5-story brick flats at 97th St., near Lexington Ave., to cost about $150,000. A. De Saldern, Arch., 130 Broadway; by C. F. Rogers, 1663 Amsterdam Ave., for two 6-story brick flats at 143d St., near Hamilton Place, to cost about $200,000. Hy. Anderson, Arch.; by S. Kohn 238 E. 114th St., for two 6-story flats at 266 and 268 Monroe St., to cost about $60,000. Edw. Wenz, Arch., 1491 Third Ave.; by D. W. Bishop, Lenox, Mass., for a 12-story office building at William and Liberty Sts., to cost about $300,000. Clinton & Russell, Archs., 32 Nassau St.; by Peter Herter, for two 6-story flats at 209 and 211 E. 81st St., to cost about $56,000. P. Herter & Son, Archs., 119 Suffolk St.

EASTON, PA.—Chas. Bolton, Witherspoon Bldg., Philadelphia, is reported to be preparing plans for the new building for Lafayette College.

EDGEWOOD, PA.—It is stated that the Western Pennsylvania Institute for Instructing the Deaf and Dumb, which was destroyed by fire, Dec. 14, loss about $150,000, will be rebuilt. Rev. J. G. Brown, Pres.

McKEESPORT, PA.—The plans of C. M. Robinson, 1910 W. Chestnut Ave., Altoona, for the church building, to cost about $50,000, have been accepted by the First Presbyterian Church, according to reports.

PHILADELPHIA, PA.—Bids are asked until Dec. 22 for tearing down the Northwest Grammar School, Section 10, and erecting a heating apparatus in the Fairhill School, 33d Section. A. F. Hammond, Secy. Bd.

PHILADELPHIA, PA.—It is stated that the Pennsylvania Company for Insurance on Lives and Granting Annuities, 517 Chestnut St., will soon ask for plans for an office building to cost about $150,000.

PHILADELPHIA, PA.—The following bids were received Dec. 16 for erecting officers' quarters at the League Island navy yard: Phillip Arms Co., 605 Bourse Bldg., Philadelphia, $21,520 and $20,340; Henry A. Tolbert, Barnegat, N.J., $25,000, $24,000; Appleton & Burrell, Philadelphia, $23,046, $21,996; John J. Conner, Philadelphia, $21,799, $20,799; F. T. Maguire, Philadelphia, $19,440, $18,940; M. P. Wells & Co., Philadelphia, $22,400, $21,600.

PHILADELPHIA, PA.—It is stated that bids will soon be asked at the Frankford Arsenal for several buildings, for which Congress has appropriated $106,000.

PITTSBURG, PA.—Bids are asked until Dec. 22 for erecting the 18th Ward School building, at the office of U. J. L. Peoples, 611 Times Bldg.——The contract for erecting the new fire engine house at Braddock and Hamilton Aves. has been let to Kerr & Fox, at $44,809. J. O. Brown, Dir. Pub. Safety.

SWISSVILLE, PA.—Bids are asked until Dec. 23 for erecting new buildings for the Union Switch & Signal Co. E. H. Goodman, Pres. and Gen. Mgr., Westinghouse Bldg., Pittsburg.

WILMINGTON, DEL.—The trustees have received plans for the county workhouse.

CHARLESTON, S. C.—Bids are asked until Jan. 5 for erecting a city hall and opera house building. Check, $500. T. T. Talley, Cy. Clk.

PORT ROYAL, S. C.—The following bids were received Dec. 16 for constructing a saw mill and boat shop at the naval station: each firm submitted six bids: D. H. Hayes & Co., 523 W. Garfield Ave., Chicago, Ill., $38,957 to $25,000; L. L. Leach & Son, 1402 Marquette Bldg., Chicago, Ill., $38,257 to $20,820; Grant Wilkins, 1 Peachtree St., Atlanta, Ga., $37,500 to $21,000; Miles & Bradt, Anstel Bldg., Atlanta, Ga., $38,400 to $23,900; Penn Bridge Co., Beaver Falls, Pa., $40,000 to $21,200; C. Thomas & Son, 1709 Penwick Hill, N. W., Washington, D. C., $41,500 to $26,900.

AUGUSTA, GA.—It is stated that J. B. White will erect a new building on the site of the one recently destroyed by fire.

BIRMINGHAM, ALA.—The trustees of Hillman Hospital will erect a new hospital building to cost about $40,000, according to reports.

SELMA, ALA.—Bids are asked until Jan. 10 for erecting a court house; check, $500. P. G. Wood, Probate Judge.

MEMPHIS, TENN.—The street railway company has filed plans for a new car barn to cost about $125,000.

MARIETTA, O.—Chas. Dowling is reported to have received the contract for erecting the Cram, Follett & Connor building on Putnam St., at about $40,000.

INDIANAPOLIS, IND.—Reports state that a company in which H. W. Lawrence, owner of the Bates House, is interested, will erect an 8-story hotel, to cost about $1,200,000.

CHICAGO, ILL.—The aldermen will be asked to appropriate $100,000 for erecting a parental school.——It is stated that the Pullman Manual Training School will be built next year. Mr. Pullman left $200,000 for its erection. N. B. Ream, J. M. Clark, J. J. Mitchell, Trustees.——Plans have been prepared for a model tenement at Maxwell and Halsted Sts., to cost about $50,000. Joseph Weisenbach, Asst. State Attorney, is reported to be interested.

CHICAGO, ILL.—Bids are asked until Jan. 15 for installing a wiring system for the U. S. Marine Hospital buildings. J. K. Taylor, Supr. Arch., Washington, D. C.

CENTREVILLE, IA.—Plans have been prepared by the C. E. Eastman Co., Des Moines, for the new auditorium building which ex-Gov. F. M. Drake will give Drake University.

DES MOINES, IA.—It is stated that the legislature will be asked to appropriate the money for a new armory building.

MINNEAPOLIS, MINN.—Plans have been filed by G. C. Christian for a 5-story mill at 6th St., between 18th and 19th Aves., S. E., to cost about $50,000.——The question of erecting a dormitory for girls at the University of Minnesota is being discussed. Miss Clara Baldwin, Chn. Com.

LINCOLN, NEB.—Fire destroyed the manufacturers' building at the penitentiary Dec. 15; reported loss, about $75,000.

KANSAS CITY, MO.—T. H. Swope will erect a 7-story brick business block at 11th and Grand Sts., to cost about $150,000.

ST. LOUIS, MO.—Plans have been filed by the Olivia Building Co. for a 4-story office building at Grand St., near Finney St., to cost about $50,000.——The question of erecting a public library to cost $1,500,000, at 14th and Olive Sts., is being discussed.

HOUSTON, TEX.—O. H. P. Rudesill & Son are preparing plans for a 3-story business building at Wood and Willow Sts. for Frank Moore, builder.——It is stated that B. A. Riesner will build a business block to be occupied by T. H. Thompson & Co.

DENVER, COLO.—Jacob Sherrer will erect a 3-story flat house at Colfax and S. 14th St., to cost about $50,000.

BERKELEY, CAL.—Bids are asked until Dec. 26 for erecting additions to several buildings of the University of California. W. A. McKowen, Acting Secy.

SAN DIEGO, CAL.—It is stated that the Normal School trustees will advertise for bids in February for erecting a new school building, to cost about $45,000.

NEPHI, UTAH.—The commissioners are reported to be taking steps toward erecting a court house.——It is stated that Z. C. M. I. will expend about $100,000 in altering its present building.

MONTREAL, QUE.—Wm. J. Conners, 599 South Park Ave., Buffalo, N. Y., will begin the construction in 30 days of three elevators, with total capacity of 9,000,000 bushels, and large double-decked warehouses. The syndicate of which Mr. Conners is the head, proposes to build a fleet of 21 steamers, for which contracts will soon be let, and to make Montreal the terminal. The vessels will be 240 x 43 ft., and will have a carrying capacity of 100,000 bushels. It is also reported that an elevator of 1,500,000 bushels capacity will be built at Port Colborne, Ont.

SAN JUAN, P. R.—Edwin Thacher, Savings Institution Bldg., Paterson, N. J., is preparing estimates for a concrete-steel hotel for the Port America Co.

LEEDS, ENG.—It is proposed to erect a new market hall to cost about $350,000. E. J. Silcock, Surv.; Leeming & Leeming, Archs., 117 Victoria St., S. W., London.

GLASGOW, SCOTLAND.—Plans are wanted for a general hospital, to accommodate 1,200 patients, to be erected on the Stobhill Estate. Premiums, about $1,000, $750, $500 and $250. J. R. Motion, Clk. Parish Council, 38 Cockrane St.

WATER-WORKS.

CHERRYFIELD, ME.—The question of works is again being considered.

KENTS HILL, ME.—The trustees of the Maine Wesleyan Seminary are said to be interested in the proposed works to be built in the spring. H. E. Trepethen may be addressed.

HOLYOKE, MASS.—The water commissioners are reported as securing estimates for a temporary pumping station.

PEABODY, MASS.—This place has appropriated $15,000 for a larger water supply from Spring Pond, according to reports.

PROVIDENCE, R. I.—The Camden Iron Works, Camden, N. J., is said to have been awarded the contract for furnishing the water pipe during 1900. The Portland Stoneware Co., Portland, Me., has the contract for the sewer pipe.

MERIDEN, CONN.—The question of adopting water meters is being considered.

NEW YORK, N. Y.—C. F. Roberts, Sanitary Supt., Dept. of Health, has recommended the use of filtering plants to the Croton water. The city is to spend about $10,000,000 for improving the works.

MANHASSET, N. Y.—The Manhasset Water Co. has applied for a charter, with a capital of $25,000, by Paul E. De Pere, Brooklyn; Thos. Patterson, Mineola, N. Y., and David L. Hardenbrook, Jamaica, N. Y.

PATERSON, N. J.—The Park Heights Land & Water Co. has been incorporated, with a capital of $500,000, by Amos L. Prescott and ex-Mayor Andrew McLean, Passaic; Wm. McKenzie, Mayor of East Rutherford, N. J., and Henry F. Bowers, of New York. The company proposes to sink 20 or 30 wells and to supply from 5 to 10 million gallons of water a day. This company has nothing to do with the People's Water Co., recently incorporated, as noted in last week's issue. An ordinance authorizing the council to grant a franchise to the latter company is being considered. Arrangements for the construction, to begin in the spring, will be made at once. Geo. Pfeiffer, Jr., Camden, N. J., and Christian Braun, Paterson, are interested.

AMBLER, PA.—We are informed that the Keasbey & Mattison Co., Ambler, 102 W. 2d St., Cincinnati, and 117 Water St., Cleveland, O., is in the market for a pumping

plant, to consist of a tower or standpipe 175 ft. high by 4 ft. in diameter, one compound engine and pump to raise 3,000,000 gallons of water against a pressure of 75 lbs. per sq. in. Thos. Rose, Supt.

CARBONDALE, PA.—The Artesian Water Co. has been incorporated, with a capital of $1,000, by E. E. Hendrick, W. T. Colville and J. E. Burr.

DANVILLE, PA.—The council has let a contract for a filter plant to purify the water supply to the New York Filter Mfg. Co., 26 Cortlandt St., New York, and 40 West Quincy St., Chicago. This company has also received the contracts for filters at Canton, Pa., and Rocky Mount.

PITTSBURG, PA.—The Century Water Co. has been organized by J. R. McCreery, W. L. Monro and A. M. O'Brien to build works in Neville.

SCRANTON, PA.—The Providence Gas & Water Co. will improve its works, according to local reports. E. E. Loomis, Pres.

HYATTSVILLE, MD.—Jas. B. Burnside writes us that information is wanted regarding proposition for a water supply to be furnished by outside capital. A supply can probably be secured from wells. Estimated cost, $25,000. Population, 2,500.

ST. MICHAELS, MD.—The question of works is again being considered. Chas. S. York, Engr., Baltimore; Wm. Willis, Chn. Com.

NORFOLK, VA.—Plans for the proposed works, electric plant, etc., for the Hampton Roads Development Co. are in the hands of D. B. Banks, 230 North Charles St., Baltimore. T. W. Sheelton, Pres.——The New York Filter Mfg. Co., New York, Chicago, and 19th St. and Allegheny Ave., Philadelphia, has been awarded the contract for a filter plant of 2,000,000 gallons capacity a day, in addition to the 6,000,000 gallon plant, recently installed by the same company.

MERCER, W. VA.—The South Side Water-Works Co. has been incorporated, with a capital of $50,000, by Peter A. Pugh, of Fairview, W. Va., and others.

TOCCOA, GA.—E. P. Simpson, it is stated, has been granted a franchise for works, an electric plant and a street railway. The works in July were estimated to cost about $10,000.

JACKSON, ALA.—M. T. White, Mobile, Ala., has furnished estimates for works and an electric plant.

BATAVIA, O.—A. T. Johnson, Secy. Bd. Trustees, writes us that the bids for constructing the works and electric plant, received Nov. 25, and advertised in Engineering News Nov. 16, have been rejected. Another vote, probably in January, for additional bonds will be required before new bids will be asked. H. C. Babbitt, Engr., Tippecanoe, O.

CANTON, O.—Local papers state that the question of building standpipes, instead of a reservoir, is being considered.

CLEVELAND, O.—Walter C. Parmley, Asst. Engr., 19 Burt St., writes us that bids for the foundations of engine house, boiler and cold storage house for the Kirkland St. pumping station will be asked early in the spring, as well as for two or four 25,000,000-gallon pumping engines. Local papers state bids will be asked in a few days, and also that a 20,000,000-gallon engine will be wanted for the Division St. pumping station.

CONNEAUT, O.—The O. H. Jewell Filter Co., Havemeyer Bldg., New York, and 40-42 W. Quincy St., Chicago, has been awarded the contract for a filter plant. The company has also a contract for increasing the Jewell filter at Dennison, O.

CUYAHOGA FALLS, O.—Calvin Vaughn is reported to have been granted a 15-year franchise for works, the city to have the option of buying the property at the end of the term.

EAST LIVERPOOL, O.—The question of a new pump at the works is being considered.

GENEVA, O.—It is stated that the council has appropriated $500 to sink two test wells for a water supply. Works, with wells as a source, will cost about $50,000, or with Lake Erie or Grand River, the cost will be $100,000. Population (1890), 2,194. Address Councilman Russell or Mayor Palmer.

BELVIDERE, ILL.—W. H. Moore, Mayor, writes us that the town will lay a water main and sink a well 2,000 ft. deep for a new water supply.

CARBONDALE, ILL.—Bids are asked until 7 p. m. Dec. 27 for constructing works. A standpipe of 150,000 capacity will probably be required. John J. Hainsworth, Engr., Indianapolis, Ind.; F. M. Caldwell, Cy. Clk.

COLLINSVILLE, ILL.—Tests for a new water supply in the American Bottoms, about 1½ miles from here, are being made.

PEKIN, ILL.—E. W. Wilson, Mayor, writes us that this city defeated the proposition Dec. 12 to issue $113,000 in bonds for the purchase of the works of the Pekin Water-Works Co.

GRAND RAPIDS, WIS.—This place is reported to have voted to put in works to cost about $46,000.

MARKESAN, WIS.—The question of building works and an electric plant is again being considered. Population, 550. H. P. Friday may be addressed.

SHEBOYGAN, WIS.—Theo. Dieckmann, Chn. Com., writes us that the city has offered to purchase for $300,000 the works of the City Water Co., controlled by the American Water-Works & Guarantee Co., 6th Ave., Pittsburg, Pa.

RED WING, MINN.—The board of managers of the state training school will ask for an appropriation for works for the institution to cost about $5,000.

MARION, KAN.—The Marion Water Supply, Electric Light & Power Co. has asked for an extension of its franchise, which expires Feb. 1, for five or ten years, according to reports.

ST. JOSEPH, MO.—The Seckner Contracting Co., The Rookery, Chicago, has been refused an extension of time in which to fulfill its contract to build the proposed works, to cost about $800,000. The Citizens' Water Co. was incorporated March 14 by A. W. Brewster, of St. Joseph; John H. Brown, Pres., Chicago, of the contracting company, and others, to build the works, to be begun by Dec. 10. The company forfeits its bond of $50,000. Address Aldermen Birkes and Akers.

DALLAS, TEX.—J. H. Traylor, Mayor, writes us that no steps have yet been taken to extend the works, nor is it likely that anything will be done for some months. It is proposed to build a new reservoir. Thos. D. Miller writes that special legislation will be asked for authority to issue bonds.

TAYLOR, TEX.—D. Murphy, Pres. Taylor Water Co., writes us that it is proposed to lay some additional mains and to build a stand-pipe, 60 x 15 ft.

LIBBY, MONT.—We are informed that examinations, surveys and report for the proposed water supply for mining and milling purposes at the Snow Shoe Mine, 20 miles south of here, have been completed in a preliminary way by Chas. W. McMeekin, Libby, for the Pacific Northwest Mining Corporation, Ltd., London, Eng. The matter now resolves itself into one of financial policy, there being no immediate necessity for further action, as a tunnel of about 1,900 ft. is involved in the construction of the plant as proposed—said tunnel being so located as to form a part of the proper development work of the mine, and will be constructed as such in the regular progress of developing the property. It is unlikely that anything further will be done with it for a year or more.

ENID, OKLA.—An election will be held Jan. 23 to vote on the question of issuing $40,000 in bonds for works. H. C. Henry may be addressed.

PAWNEE, OKLA.—An election will soon be held to vote on the question of issuing $15,000 in bonds for works.

OKLAHOMA CITY, OKLA.—The question of building city works is being considered by the council, and information is said to be wanted at once. It is stated that the council has rescinded the franchise for works granted to H. G. Thomas and D. H. Scott in 1892. The plant was built in 1893. Population (1890), 4,151.

PONCA CITY, OKLA.—R. I. Edwards, it is stated, has purchased $25,000 of 30-year 6% bonds for the proposed works.

GOLDFIELD, COLO.—The question of issuing $20,000 in bonds for water rights several miles east of here is being considered. At present the water supply for this city is furnished by the works at Victor. A. W. Grant, Cy. Clk.

LEADVILLE, COLO.—The question of municipal works is being considered. Estimated cost, about $162,000.

VICTOR, COLO.—It is proposed to spend $10,000 for extending the mains.

YREKA, CAL.—An election will be held Jan. 9 to vote on the question of issuing $75,000 in 5% bonds for gravity works. U. F. Brown, Cy. Clk.; C. E. Moore, Engr., Santa Clara, Cal.

QUEBEC, QUE.—The city will ask the legislature for authority to issue $40,000 in bonds for a filter plant, according to reports.

BRIDGEBURG, ONT.—J. F. Gross, Welland, Ont., is reported to have submitted recommendations for works, with a pumping station, to cost about $26,000.

GREENWOOD, B. C.—The Phoenix Water-Works Co. has been incorporated to build works. J. A. Corryell, Engr., and Mr. Rumberger, of the Rumberger addition, Phoenix, are interested.

NELSON, B. C.—Bids are asked until Dec. 26 for the purchase of $8,000 of 30-year 4½% bonds for extending the works, and $7,000 for extending the electric plant. J. K. Strachan, Cy. Clk.

SEWERAGE.

BRIDGEPORT, CONN.—The cost of constructing a trunk sewer to relieve the nuisances existing at Berkshire Millpond and in the vicinity of Noble Ave., Huntington Road and Beardsley Park, is estimated by City Surveyor Scofield at $40,000.

WEST HAVEN, CONN.—A committee has been appointed to investigate the cost of a system.

ALBANY, N. Y.—Bids are asked by the board of contract until Dec. 30 for cleaning, widening and repairing Fox Creek sewer and for enlarging certain basins, and for extending storm sewer inlets.

SAG HARBOR (L. I.), N. Y.—An election will be held in January to vote on the question of establishing a system. The commission has plans which they will submit to the state authorities for approval; estimated cost, $15,000.

SCHENECTADY, N. Y.—An appropriation of $25,000 for sewers will be asked of the legislature.

ELIZABETH, N. J.—Bids are asked until Jan. 2 for constructing 315 ft. 2 x 3-ft. brick, 515 ft. 18-in. pipe sewer, 30 6-in. connections, 470 ft. 12-in. pipe sewer, 32 6-in. connections, 11 manholes, 6 basins and 150 ft. culvert. N. K. Thompson, St. Comr.——Plans for the trunk sewer through Elizabeth from the Oranges and other municipalities in Essex county have been completed and submitted to the Essex county representatives; estimated cost, $100,000.

DUNMORE, PA.—A system to cost about $60,000 is proposed. At the last election it was voted to bond the borough for the improvement.

McKEESPORT, PA.—The proposition of constructing the proposed Crooked Run sewer in the Eighth Ward has been postponed indefinitely. The plans prepared by F. F. Holan call for 5,250 ft. of sewer, to cost $80,000.

READING, PA.—It is proposed to spend $100,000 during 1900 for new sewers.

WILLIAMSPORT, PA.—Bids are asked until Jan. 11 for constructing about 20 ft. 30-in., 2,710 ft. 24-in., 1,700 ft. 20-in., double strength pipe sewers, with manholes, etc., as stated in our advertising columns. Geo. D. Snyder, Cy. Engr.; Theo. Cornman, Cy. Clk.

BALTIMORE, MD.—The council will ask for legislative authority to build a system to cost $10,000,000. It is also stated that the Maryland Construction & Contracting Co. is being organized to seek authority to build the system. Francis E. Waters, Pres.; Henry W. Warner, Secy.

SALISBURY, N. C.—Bids are asked until Jan. 8 for the purchase of $25,000 of sewer bonds. S. F. Lord, Mayor.

GREENVILLE, MISS.—J. M. Lee, Cy. Clk., writes us that the contract for the system has been let to Irwin Bros., Greenville, O., at $41,548, work to commence at once.

ALEXANDRIA, LA.—The plans prepared by Ira W. Sylvester, Cy. Engr., for a system have been approved by Jas. H. Fuertes, Consult. Engr., 100 William St., New York, and the contract for the construction will probably be let soon.

DONALDSONVILLE, LA.—The proposition to issue $40,000 in bonds for sewers and public improvements was defeated at the election held on Dec. 5.

LOUISVILLE, KY.—It is reported that contracts for improvements are about to be let. The board of works is preparing an estimate of the improvements needed for 1900, in which will probably be recommended the expenditure of about $1,000,000 for sewers.

CLEVELAND, O.—W. C. Parmley, Asst. Engr., writes us that bids will soon be asked for constructing main sewers in Meridan, Superior and Erie Sts., and Woodland Ave., and for the outlet section of the Walworth sewer.——Plans have been filed in the office of the board of control for sewers in 10 streets. W. E. Sage, Secy.

LAKEWOOD, O.—Henry W. Elliott, Chn. Com., writes us that plans have been prepared for a combined system and are now in the hands of F. Herbert Snow, Engr., Columbus, O., and Brockton, Mass.

HIGHLAND PARK, MICH.—The council has decided to build two new lateral sewers, one 7,000 ft. long in Farrand Ave. and the other in Jarold Ave., 1,750 ft. long.

ST. PAUL, MINN.—Bids are asked until Dec. 28 for constructing a sewer in Dale St. C. H. Bronson, Clk. Bd.

ATLANTIC, IA.—Sewerage and paving are being considered; estimated cost, $40,000. Address J. H. Boys.

MILWAUKEE, WIS.—An ordinance providing for the issuance of $100,000 in bonds for sewers in the west side was passed by the council Dec. 11. E. M. Schnengel, Cy. Clk.

TIPTON, IA.—Local papers state that $4,500 will be spent for new sewers.

HOUSTON, TEX.—The Attorney-General has approved the registration of $300,000 of bonds for a system. D. H. Brasbear, Mayor.

EVERETT, WASH.—An election will be held Dec. 29 to vote on the question of bonding the city for $90,000 for a system.

WALLA WALLA, WASH.—The council has authorized the committee on sewers and drainage to employ an engineer to prepare plans and specifications for a system.

LOS ANGELES, CAL.—The committee has received the report of Rudolph Hering, Consult. Engr., 100 William St., New York, in which is recommended more air and better facilities for flushing the system.

MERCED, CAL.—W. H. Turner, Mayor, writes us that a system is proposed for next year.

BROCKVILLE, ONT.—Bonds for $30,000 for sewers and other improvements have been sold to C. H. Walker & Co.

SARNIA, ONT.—An election will be held Jan. 1 to vote on the proposition to issue $25,000 in bonds for a trunk sewer in Devine St., from Milton St. to the river. Plans have been prepared by J. H. Jones.

QUEBEC, QUE.—It is reported that this city will ask for authority to issue $50,000 in bonds for additional drainage in St. Sauveur, and to pave Grand Allee with asphalt.

GARBAGE DISPOSAL—STREET CLEANING

NEW HAVEN, CONN.—Bids are asked until Dec. 26 for removing garbage for one year from Feb. 1, 1900. W. Bailey, Cy. Clk.

ALBANY, N. Y.—The board has directed the Clerk to advertise for bids for garbage disposal.

SALEM, PA.—It is stated that G. H. Giles has received the contract for street cleaning and collecting garbage.

BROOKLYN, O.—It is stated that H. T. Edmiston, 1167 Pearl St., has secured figures for a street cleaning system.

TOLEDO, O.—The question of establishing a crematory is being discussed.

INDIANAPOLIS, IND.—Bids are asked until Dec. 27, according to reports, for street sweeping for 1900 and 1901. M. A. Downing, Chn. Bd. Pub. Wks.

OAKLAND, CAL.—J. W. Northrup has applied for an exclusive franchise for the cremation of garbage.

STREETS AND ROADS.

PAWTUCKET, R. I.—It is stated that the question of asphalting Cottage St. is again being discussed.

HARTFORD, CONN.—The council has passed a resolution to lay out Fern St. and to build a sewer in Franklin Ave. H. F. Smith, Cy. Clk.

BUFFALO, N. Y.—The following bids were received for paving Niagara St.: The German Rock Asphalt Co., $10,993; Barber Asphalt Paving Co., $11,330; H. P. Burgard, $11,750. H. P. Burghard's bid of $9,539 was the lowest for paving May St.——The contract for repaving Swan St. with asphalt has been let to the American Contracting Co., at $32,750.

FLUSHING (L. I.), N. Y.—The question of widening and extending South Parsons Ave. is being discussed, according to reports.

ROCHESTER, N. Y.—Bids are asked until Dec. 21, according to reports, for paving on Ames and Clifford Sts. E. A. Fischer, Cy. Engr.

SYRACUSE, N. Y.—The city clerk has been directed to advertise for bids for paving with asphalt North Clinton St. and Belden Ave.

BAYONNE, N. J.—Bids are asked, according to reports, until Jan. 2 for the purchase of $75,000 of street improvement bonds.

FAIRVIEW, N. J.—Bids are asked until Jan. 3 for grading Anderson Ave. F. B. Wallace, Borough Clk.

JERSEY CITY, N. J.—The question of improving Newark Ave. is being discussed.

PASSAIC, N. J.—The following bids were received Dec. 8 for macadamizing Brook Ave.: James Sowerbutt, $7,530; Edward Dowling, $7,144; A. J. Van Brunt, $7,172; Francis J. Marley, $6,986; August Mowel, $7,057; William De Vogel, $7,929.

WEST HOBOKEN, N. J.—Bids are asked until Dec. 21 for grading and paving three streets in the township of North Bergen. E. J. Foerch, Township Clk.

ALLEGHENY, PA.—The contract for paving Clayton Ave. and Catawba St. has been let to Booth & Flinn, 425 Forbes Ave., Pittsburg, at $2,557 and $1,545.——The council has recommended the improvement of several streets.

ANNAPOLIS, MD.—The council has been asked to issue $100,000 in bonds for street improvements.

BALTIMORE, MD.—W. P. Ryan, Mayor's Secy., writes us that nothing definite has been done toward securing a plant for repairing asphalt.

ROANOKE, VA.—Bids are asked until Jan. 6 for constructing several street improvements. J. H. Wingate, Cy. Engr.

SOUTH BOSTON, VA.—A. F. Faulkner, Cy. Clk., writes us that no paving is contemplated for some time.

NEW ORLEANS, LA.—The city engineer has been directed to prepare plans for paving on portions of two streets, according to reports.——The council has been asked to authorize the paving of Frenchman St.

CINCINNATI, O.—Bids are asked until Jan. 16 for improving several streets. G. H. Spellmire, Cy. Clk.

CLEVELAND, O.—The council has passed ordinances authorizing the improvement of several streets. H. H. Burgess, Cy. Clk.——Jas. Ritchie, Ch. Engr., writes us that the property for the Bank St. extension has been secured, the tax ordinance passed, new grade established and advertisements made for selling the present buildings.

CLEVELAND, O.—The board has passed an ordinance providing for the improving of four streets. H. H. Burgess, Cy. Clk.

SAGINAW, MICH.—The council has passed a resolution to pave Lapeer St. with brick.

WEST BAY CITY, MICH.—City Engineer Bloomshield has been directed to prepare plans for paving Midland St. with brick.

ALTON, ILL.—The board has decided to pave Garden and Manning Sts. in the spring.

BELVEDERE, ILL.—W. H. Moore, Mayor, writes us that petitions are in circulation for asphalting a 100-ft. wide street and laying an 8-in. x 1,200-ft. sewer.

SALEM, ILL.—Bids are asked by the board of improvements until Dec. 26 for improving Broadway with 6,757 sq. yds. of paving.

MINNEAPOLIS, MINN.—The appropriation for paving for 1900 is $28,000; the paving committee will meet after Jan. 1 to consider the question of paving several streets.

ST. PAUL, MINN.—Bids are asked until Dec. 22 for paving portions of three streets. C. H. Bronson, Cy. Clk.

ATLANTIC, IA.—Paving and sewerage are being considered. Address J. H. Boys.

LEAVENWORTH, KAN.—It is stated that bids will soon be asked for asphalting the North Esplanade and Shawnee and Main Sts. S. F. Neeley, Mayor.

SOUTH OMAHA, NEB.—It is stated that the South Omaha stock yards will be repaved with brick.

ST. JOSEPH, MO.—J. R. Radcliffe, Cy. Engr., writes us that an ordinance has been passed providing for asphalting Sylvania St., bids have not yet been asked; also that owing to the extension of the city limits the situation regarding the paving of Illinois Ave. has been changed greatly.

SPOKANE, WASH.—J. M. Comstock, Mayor, writes us that the contract for asphalting four streets has been let to the Alcatraz Paving Co., of California, at about $40,000; also that the city also contemplates about 1¾ miles of paving on two streets; contracts not yet let. O. A. Weile, Cy. Engr.

TORONTO, ONT.—Bids are asked until Dec. 26 for paving portions of three streets with asphalt. John Shaw, Mayor.

MANUFACTURING PLANTS.

OLDTOWN, ME.—J. Fred. Webster, of Orono, Me., proposes to build a $1,000,000 pulp and paper mill here next season, according to reports. It is said that a power dam will be built at Gilman Falls for the mill.

TIVERTON, R. I.—It is reported that the Bourne Mills will build a new mill in this town. Bonds amounting to $800,000 will be issued by the company. G. A. Chase, Treas., Fall River, Mass.

FORESTVILLE, CONN.—The case department of the E. N. Welch Mfg. Co.'s shops was destroyed by fire Dec. 14; reported loss, about $60,000. A new building will be erected at once.

HAMMONTON, N. J.—It is reported that F. H. & H. L. Bennett, Collingswood, have plans for a glass tank factory, which they will build here, to cost about $40,000.

CORAOPOLIS, PA.—The Duquesne Steel Foundry Co., recently incorporated, proposes to erect a new steel plant on a 19-acre site in this town, to cost about $250,000. A. W. Herron, Thos. Rodd and E. Kneeland are interested.

HAZLETON, PA.—A. T. McAllister wrote us Dec. 14 that the contract for a building for the Schuylkill Plush & Silk Co. would be let in 20 days. The building will be 40 x 50 ft. and one story high; estimated cost, $15,000. The equipment has been purchased. E. H. Davis, Pres., Scranton.

JOHNSTOWN, PA.—Local papers state that Philip Hughes and Geo. Gore have leased some land in this town on which they will erect a foundry and machine shop.

PITTSBURG, PA.—Plans are now being prepared, according to reports, by Thos. Rodd, Ch. Engr. Pennsylvania Co., for a new forge and steel castings plant for the Westinghouse Machine Co. Two steel buildings will be erected. The steel castings plant will have a capacity of 80 tons a day, and the forge will be able to turn out forgings weighing as much as 20 tons apiece. The improvements will cost about $1,000,000.

SHOEMAKERSVILLE, PA.—Wm. Steele & Sons have plans for a brick sewer pipe factory and terra cotta works which will be erected by the Schuylkill Valley Clay Mfg. Co. The main building will be 100 x 300 ft., with 12 kilns. Jos. W. Huntler, Pres., Jenkintown; A. L. Loughbride, Vice-Pres., Philadelphia.

FREDERICKSBURG, VA.—Bids will be received until Dec. 28, according to reports, for constructing the building for the beet sugar factory to be erected here. B. T. Spencer, Pres., Fredericksburg Sugar Beet Co., may be addressed.

LURAY, VA.—It is reported that A. E. Shaffer, Luray, has purchased a tract of land near Luray Depot on which he will erect a bark works, consisting of bark mills and chippers. The building will be erected the first of the year.

MOORHEAD, MISS.—Plans for the proposed mill of the Moorhead Cotton Mills, recently incorporated, have been prepared, according to reports, by Chas. A. M. Praray & Co., Providence, R. I. The contract for the building has been let. The contract for machinery has not yet been let. The equipment will include 5,000 spindles, 300-HP. steam plant, etc. C. H. Pond, Pres.

MAYFIELD, KY.—T. B. Robertson, Secy., Mayfield Coal & Ice Co., writes us that the equipment has been purchased for the company's ice plant, but an electric dynamo and fixtures will probably be needed. Henry Vogt Machine Co., Arch., Louisville.

FINDLAY, O.—Manager Dalzell, of the National Glass Co., states that the company proposes to build new furnaces to increase its capacity 60%.

DETROIT, MICH.—It is reported that the Harrow Springs Co., Kalamazoo, has purchased the site of the Coldstream mills, on which it proposes to erect three buildings for rolling mill purposes.

CHICAGO, ILL.—It is stated that a company is being organized with $250,000 capital to build a lead pencil factory.

DE KALB, ILL.—The American Steel & Wire Co. will remove its plant from the McMullen Woven Wire Co.'s plant at Evanston, to De Kalb.

FRANKLIN PARK, ILL.—The Le Maire Optical Co. will establish a factory here to cost about $500,000.

MILWAUKEE, WIS.—The Illinois Steel Co. will spend $3,500,000 in erecting six additional mills.——It is stated that a company will build a $600,000 malt house. L. J. Merkel, Mgr.——E. P. Allis & Co. are reported to be about to build a $400,000 addition to its plant.

DARDANELLE, ARK.—C. B. Cotton, Mgr., writes us that the Arkansas Valley Cotton Oil Co. will receive bids for a six-ton ice plant in January.

TEMPLE, TEX.—J. C. Mitchell, Mgr. Temple Cold Storage & Ice Factory, writes that the contract for the building for the company's ice plant, which will be 75 x 104 ft., with 12 rooms, one 50-ton ice vault, one boiler house and smaller building will be let this month; estimated cost of structures $10,000. The contract for the equipment, which will consist of four 100-HP. boilers, one 75-ton refrigerating machine, one 70-light 16-candle power dynamo, etc., will be let at once; estimated cost, $25,000.

SEATTLE, WASH.—It is stated that the Armour and Swift companies will build large packing houses here.

PETALUMA, CAL.—The United States Smokeless Powder Co. will erect a dynamite plant, to cost about $500,000.

NEWBERG, ORE.—It is stated that a company of German capitalists will build a sugar factory to cost about $600,000.

CLAIRAUX (AUBE), FRANCE.—The Societe des Forges et Laminoirs de l'Aube has been incorporated with a capital stock of $500,000 to build iron works.

BARCELONA, SPAIN.—It is reported that the Sociedad Maquinista Terrestie y Maratima will extend its works. It is also stated that Cipriam Tejedor & Co. have organized the Compania Electrica de Barcelona, and that early in 1900 will want bids for machinery, etc.

MISCELLANEOUS CONTRACTS.

TELEPHONE.—Pottsville, Pa.—The Schuylkill Telephone Co. has been granted a franchise. G. A. Berner, Cy. Clk.

DAM.—Plainwell, Mich.—It is stated that Col. E. Dunbar and J. E. Botsford will build a dam between Otsego and Plainwell.

DRAINAGE.—Lake City, Mo.—It is stated that a 15-mile ditch will be built from Waldo Lake to the Missouri River West.

CAR FERRY.—Saginaw, Mich.—It is stated that the Pierre Marquette R. R. will build another car ferry across Lake Michigan.

TUNNEL.—Dyea, Alaska.—The Victoria-Yukon Trading Co. is reported to be about to build a tunnel to Bennett City. M. King, Mgr.

POLES.—Winnipeg, Man.—Bids are asked by the Bell Telephone Co. of Canada until Jan. 1 for furnishing 7,000 cedar poles, 25 ft. long.

DOCK.—Tampa, Fla.—Phillips & Fuller will erect a dock and warehouse on the property of the Crowell-Savarez Co., according to reports.

TELEPHONE.—Pittsburg, Pa.—The council has granted franchises to the Pittsburg & Allegheny Central Co. and the Home Telephone Co. of Pennsylvania.

WHARF.—North Bay, C. B.—The contract for building the government wharf at North Bay is reported to have been let to Heney & Smith, at about $30,000.

WET PAN.—Firebrick, Ky.—The Kentucky Fire Brick Works want a second-hand wet pan with wooden or iron frame for grinding fire-clay. L. C. Turley, V.-Pres.

SANITARY BONDS.—Chicago, Ill.—Bids are asked until Dec. 27 for the purchase of $1,000,000 sanitary improvement bonds. W. Boldenweck, Pres. Bd. Trustees.

PIER EXTENSION.—Muskegon, Mich.—Bids are asked until Jan. 19 for erecting a pier extension, as stated in our advertising columns. Capt. C. Harding, U. S. Engr.

FERRY.—Stamford, Conn.—It is stated that the North & East River Steamboat Co. will start a ferry line to Northport, L. I., and possibly between several other points.

PUMPS.—Victoria, B. C.—Bids are asked by F. C. Gamble until Jan. 6 for furnishing and installing two pumps of 16,000 gallons capacity a minute at the Matsqui Dike, according to reports.

PIER EXTENSION.—Portage, Mich.—Bids are asked until Jan. 15 for pier extensions at Portage Lake, as stated in our advertising columns. Capt. Chester Harding, U. S. Engr., 51 Park St., Grand Rapids.

BREAKWATER.—Grand Marais, Minn.—Bids are asked until Jan. 15 for building a breakwater and extensions to three breakwaters, as stated in our advertising columns. Maj. C. B. Sears, U. S. Engr., Duluth, Minn.

COAL DISCHARGING PLANTS.—Stockholm, Sweden.—Press reports state that the State Department of Railways, Royal Administration, proposes to erect coal discharging plants at Stockholm, Gothenburg and Malmo. C. F. Sundberg, Dir. Ways and Works; T. Nordstrom, Gen. Dir., Stockholm.

CONSTRUCTION MATERIALS—Philadelphia, Pa.—Bids are asked until Jan. 20 for furnishing a quantity of cement, broken stone and sand at the government wharves at Fort Mott, N.J., and Fort Du Pont, Del., as stated in our advertising columns. Lieut.-Col. C. W. Raymond, U. S. Engr.

RAILS.—Newcastle, New South Wales.—U. S. Consul Goding reports that there is a great scarcity of steel and iron rails in this colony. Should American manufacturers look into the matter at once, it is believed that they could secure a large order—perhaps about $973,300 worth. The colonial authorities are anxious to obtain rails. Address the Colonial Agent, Westminster Chambers, 9 Victoria St., S. W., London, Eng.

CONTRACT PRICES.

CRIB BREAKWATER.—Sheboygan Harbor, Wis.—Capt. J. G. Warren, U. S. Engr., Milwaukee, Wis., received the following bids Dec. 14, 1899, for building a crib breakwater in Sheboygan Bay; (A) Christie, Lowe & Heyworth, Chicago; (B) Edward Gillen, Racine, Wis.:

		A.	B.
White pine	912,000 ft. B.M.	.....	$28.00
Norway pine	912,000 " "	$39.06	27.00
Hemlock	588,000 " "	25.68	22.00
Pine plank	6,000 " "	31.00	21.00
Stone	5,700 cords...	6.00	6.25
Foundation piles	441 each...	12.12	12.00
W't iron drift bolts	111,000 lbs.....	.03⅝	.03½
" screw bolts	2,500 "	.03⅝	.04
" spikes	5,500 "	.04	.04
Total for 700 lin. ft. breakwater		$94,432	$83,720*

*This total bid is for white pine, while his bid for Norway is $82,808.

PAVING.—Omaha, Neb.—The Grant Paving Co. has submitted the lowest bid for asphalt paving in Ames Ave., from 25th to 30th St., at $2.37 a yd. Edward Phelan submitted the lowest bid for brick paving, $1.77. Both bids are for a guarantee of five years.

WATER MAINS, ETC.—New York, N.Y.—The following bids were received Dec. 14 for furnishing and laying water mains in the Boulevard and Park Ave., and in 86th, 85th and 82d Sts., etc.; all bidders agree to complete work in 200 days; William Dalton, Comr. Water Supply:

Bids Received at New York, N. Y., Dec. 11, 1899, for Furnishing and Laying Water Mains, Etc.

Quantities.	Wm. T. Baird, 1235 2d Ave.	Wm. F. Norton, 147 E. 125th St.	J. S. Rodgers, 340 E. 125th St.	United Co., 17 Park Row.	C. H. Connell, 2 Cortlandt St.	J. Cornwall, Jr., 69 E. 127th St.	Kelly & Kelley, St. Paul Bldg.	W. H. Masterson, 4171 P'rk Ave.
Straight pipe ..... 2,420 tons....	$26.80	$26.00	$28.60	$27.00	$29.00	$31.40	$27.00	$29.75
Brncns & spec. castings 78 tons....	47.00	48.50	50.00	50.00	48.00	56.00	47.00	50.00
Rock excav.,no blasting 300 cu. yds.	4.00	5.00	.64	5.00	6.00	4.00	12.00	2.00
Rock excavation ..... 5,700 " "	2.50	.40	.64	2.20	3.50	.80	5.00	2.00
Earth excavation .....15,200 " "	.30	.40	.64	.50	.60	.80	.70	.30
Filling .....18,000 " "	.10	.40	.64	.20	.01	.15	.40	.15
36-in. pipe. .....10,500 lin. ft..	.83	1.40	1.00	1.00	.75	1.00	.90	.85
20-in. " ..... 750 " "	.45	.50	1.00	.60	.75	.60	.60	.50
12-in. " ..... 3,000 " "	.35	.25	.20	.40	.50	.40	.40	.40
6-in. " ..... 1,500 " "	.23	.15	.20	.25	.30	.20	.30	.30
36-in. st'p-c'ks & gear'g 2 each...	525.00	475.00	600.00	600.00	550.00	600.00	600.00	550.00
20-in. " " 4 " ...	2.00	150.00	200.00	200.00	200.00	200.00	200.00	200.00
12-in. " & boxes. 10 " ...	40.00	48.00	75.00	60.00	55.00	65.00	70.00	100.00
6-in. " " 10 " ...	25.00	35.00	75.00	25.00	35.00	50.00	50.00	50.00
Double-nozzle hydrants. 8 " ...	80.00	72.00	75.00	75.00	80.00	90.00	100.00	100.00
Replacing asphalt ..... 2,800 sq. yds.	3.80	4.00	4.00	3.50	4.80	4.00	3.85	4.00
Repave pavemt & flag'g 1,800 sq. yds.	.25	.35	.40	.25	.30	.50	1.00	.60
Relay stone blk pavemt 1,800 " "	1.25	1.10	1.00	1.25	1.75	1.50	5.15	1.15
Curb and gutter.... 300 lin. ft..	.08	.05	.01	.20	.15	.10	50.00	.05
Masonry: Brick ..... 140 cu. yds.	9.00	10.00	10.00	12.00	15.00	10.00	20.00	10.00
Concrete ..... 150 " "	4.50	5.00	3.00	7.00	6.00	3.50	10.00	4.00
Blow-offs ..... 5 sets....	15.00	5.00	10.00	25.00	25.00	20.00	200.00	20.00
24-in. vit. drain-pipe... 190 lin. ft..	1.50	1.50	3.00	2.00	1.50	2.00	2.00	1.50
18-in. " " .. 140 " "	1.00	1.00	3.00	1.50	1.50	1.25	1.50	1.00
15-in. " " ... 200 " "	.75	.60	3.00	1.00	1.00	1.00	1.00	1.00
12-in. " " ... 500 " "	.50	.50	3.00	.50	1.00	.75	.75	.75
8-in. " " ... 100 " "	.30	.30	2.00	.40	.60	.45	.50	.50
6-in. " " ... 120 " "	.20	.25	1.00	.30	.50	.35	.40	.40
Total	$120,172	$119,624	$133,483	$126,986	$140,986	$135,368	$163,034	$127,868

FLOATING DOCK.—Nome City, Alaska.—It is stated that a company is being organized to build a floating dock, connected to the shore by a line of caissons and a cable to convey surf buckets.

NAVAL SUPPLIES.—Washington, D. C.—Bids are asked until Dec. 26 for furnishing a quantity of steel, hardware, hinges, belting, etc., at the navy yard. A. S. Kenny, Paymaster-General, U. S. N.

PIER EXTENSION.—Grand Haven, Mich.—Bids are asked until Jan. 17 for erecting a pier extension, as stated in our advertising columns. Capt. C. Harding, U. S. Engr., Grand Rapids.

STEAMSHIPS.—Newport News, Va.—The Morgan Line is reported to have let the contract for four new freight and passenger steamers to the Newport News Shipbuilding & Dry Dock Co., at about $2,400,000.

FERRY SLIP.—San Francisco, Cal.—Bids are asked until Jan. 20 for constructing a ferry slip, 110 x 139 ft., at the Mare Island Navy Yard. M. T. Endicott, Chief of Bureau of Yards and Docks, Washington, D. C.

RETAINING WALL.—Philadelphia, Pa.—Bids are asked until Dec. 30 for constructing about 1,200 ft. of retaining wall at the League Island Navy Yard. M. T. Endicott, Ch. Bureau Yards and Docks, Washington, D. C.

NAVAL SUPPLIES.—Philadelphia, Pa.—Bids are asked until Dec. 26 for furnishing a quantity of steel rings, bolts, washers, cement, etc., at the League Island Navy Yard. A. S. Kenny, Paymaster-General, U. S. N.

STEAMBOAT.—Ft. Morgan, Ala.—Bids are asked by Q.-M., New Orleans, La., until Dec. 30 for furnishing a steamboat; capacity, 50 passengers and 50 tons freight; length, 90 ft.; beam, 20 ft.; freeboard, 4 ft.; draft, 9 ft.

NAVAL STATION.—Kittery, Me.—Rear-Admiral Endicott, Ch. Bureau Yards and Docks, has recommended an expenditure of $602,000 at Kittery, to include quay walls, $8,000; equipment shop, $100,000; fire system, $110,000.

STEAM HEAT AND POWER.—Seattle, Wash.—The American District Steam Heating Co., Lockport, N. Y., is reported to have received a $200,000 contract for reconstructing the distributing system of the Seattle Steam Heat & Power Co.

CANAL WORK.—Albany, N. Y.—The following contracts for canal work have been let: For rebuilding culvert 59, to Wm. T. O'Conner, Syracuse, $5,663; for rebuilding waste weir and spillway at Brockville, to Doolittle & Lewis Herkimer, at $3,627.

PARK IMPROVEMENTS.—New York, N. Y.—Bids are asked by the Department of Parks, Arsenal, Central Park, until Dec. 28, for furnishing a quantity of coal and trap rock, a steam road roller, and for erecting a steam heating plant at Hamilton Fish Park, Pitt St.

RIP-RAP STONE.—New Haven, Conn.—The following bids were received Dec. 12, 1899, by Lieut.-Col. D. P. Heap, U. S. Engr., Tompkinsville, N. Y., for furnishing and placing rip-rap stone for protection to the New Haven breakwater light station, Conn.: John A. Bouker, 110 Wall St., New York, 84.4 cts. a ton; J. F. Quinn, 129 Broad St., New York, 95 cts.; John Beattie, Leete's Island, Conn., $1.07; Hughes Bros. & Bangs, Syracuse, N. Y., $1.14; Eugene S. Belden, 217 Laurel St., Hartford, $1.21; Thos. A. Scott, New London, Conn., $1.60; Chas. F. Stoll, New London, $2.15.

ASPHALT PAVING.—Mishawaka, Ind.—The Western Paving & Supply Co. has been awarded the contract at $1.89 for asphalt paving in Second St. The rest of the bid is as follows: Grading, 24 cts. a cu. yd.; cement curbing, 20 cts. a lin. ft. The work is to be completed by Nov. 1.

ASPHALT PAVING.—Petersburg, Va.—N. T. Paterson, Jr., Pres. Council, writes that the Barber Asphalt Paving Co., New York, was awarded the contract Dec. 12, 1899, for 7,500 yds. of asphalt paving in South Sycamore St., at $2 a yd. Bids for further paving will soon be asked, and about $100,000 will be spent. T. R. Dunn, Cy. Engr.

BRICK PAVING.—Asheville, N. C.—M. W. Robertson, Cy. Clk., writes us that the contract for 11,664 yds. of brick paving has been let to the Tennessee Paving Brick Co., at $1.49 a yd. The contract for N. Court Square paving, estimated cost $2,496, has not been let. B. M. Lee, Cy. Engr.; J. T. Bostic, Supt. Sts.

RIVER IMPROVEMENTS.—Oregon.—The following are the successful bids received July 25 and Sept. 1, 1899, by Capt. W. W. Harts, U. S. Engr., Portland, Ore., for river improvements in Oregon: Jetties at the mouth of the Coquille River: John Kiernan, Portland, piles, 9,000 lin. ft., 13 cts.; lumber, 60,000 ft., B. M., $11; ship spikes, 1,500 lbs., 7 cts.; drift bolts, 3,500 lbs., 7 cts.; straps or stirrups, 500 lbs., 7 cts.; old rails relaid, 25 tons, $8; new railway spikes, 1,000 lbs., 7 cts.; new frogs and switches, 1, $50; mattresses, 2,000 yds., $1.15; stone 40,000 tons, 71½ cts.; new fish plates, 100 pairs, $1; bolts and nuts, new, for fish plates, 300 lbs., 11 cts.; total, $33,568. Improving canal at Cascades, Columbia River: H. W. Taylor, Cascade Locks, Ore., rock excavation, 200 yds., $1.25; earth excavation, 15,000 yds., 29 cts.; dry rubble, 2,000 yds., $1; dry slope pavement, 7,800 yds., $3.05 and $3.40; dry level pavement, 2,600 yds., $1.99; rubble pavement in mortar, 2,300 yds., $6.45; wire fence, 4,000 ft., 22 cts.; total, $51,279 and $54,009. Jetty at mouth of Siuslaw River: Hale & Smith, Portland, piles, 15,000 ft., 12 cts.; lumber, 80,000 ft. B. M., $12; rails, new, 20 tons, $50; drift bolts, stirrups or straps, 5,000 lbs., 5 cts.; railroad spikes, new, 1,000 lbs., 5 cts.; ship spikes, 3,000 lbs., 5 cts.; fish plates, new, 120, 35

cts.; bolts and nuts, new, for fish plates, 100 lbs., 5 cts.; frogs and switches, new, 2 of each, $40; brush mattresses, 3,500 yds., 90 cts; stone, 25,000 tons, 65 cts.; total, $23,-737. Jetty, etc., at entrance to Coos Bay, Ore.: Wakefield & Jacobson, Portland, piles, 20,000 ft., 15 cts.; lumber, 250,000 ft., B. M., $14; rails, new, 20 tons, $55; drift bolts, stirrups and straps, 70,000 lbs., 5½ cts.; railroad spikes, new, 4,000 lbs., 5 cts.; ship spikes, 4,000 lbs., 5 cts.; fish plates, new, 100 joints, 75 cts.; frogs and switches, 2 of each, $125; stone, 200,000 tons, 57½ cts.; total $123,710.

INDUSTRIAL NOTES.

THE NEW ENGLAND STRUCTURAL CO., Boston and Everett, Mass., has just shipped to Great Works, Me., the steel roof for the addition to the plant of the Penobscot Chemical Fiber Co., of that place.

THE OTTO GAS ENGINE WORKS, Philadelphia, announces that the Jury of Awards at the National Export Exposition awarded it the silver medal and blue ribbon, the highest award obtainable for an exhibit of gas and gasoline engines.

THE LUDLOW-SAYLOR WIRE CO., St. Louis, Mo., has purchased a tract of land of 60,000 sq. ft. on which to erect a new factory to provide additional facilities for the manufacture of fences, railings, elevator coils, wire screens, and screens for mining work. The new buildings will be erected at once.

THE NEW YORK FILTER MFG. CO., 26 Cortlandt St., New York, reports recent orders for plants to purify town water supplies at Danville, Pa., Canton, Pa., and Rocky Mount, N. C., and that the city of Norfolk, Va., for which a 6,000,000-gallon plant was recently installed has ordered filters to purify an additional 2,000,000 gallons a day.

THE G. M. NICHOL WHEEL SCRAPER CO., 2414 Broadway, Kansas City, Mo., is successor to the Kansas City Wheel Scraper Co., the latter company having sold out to G. M. Nichol, formerly of Independence, Ia. The new company will carry on business on the same lines, supplying scrapers and other grading machinery.

WM. B. SCAIFE & SONS, Pittsburg, announce that the manufacturing establishment of Marland, Neely & Co., Pittsburg, which was recently destroyed by fire, has been replaced by a steel frame structure covered with corrugated iron, designed and erected by them, and that the building was completed within 40 days after contract was awarded.

THE KENTUCKY FIRE BRICK WORKS, Firebrick, Ky., announces that Jan. 1, 1900, there will be in blast 27 blast furnaces lined throughout with firebrick of its manufacture, a record which few can equal. This company has one of the largest firebrick plants in the United States, located in the midst of several thousand acres of Kentucky mint clay owned by it.

THE CLAYTON AIR COMPRESSOR WORKS, 26 Cortlandt St., New York, has an order for four large air compressors for the Russian Government, for driving pneumatic tools, which are now being extensively adopted in the Cronstadt navy yards. The company has recently shipped three $5,000 compressors for the Stettin navy yards of the German Government. It is said that no less than 15 Clayton compressors are now in use in the various government shops throughout Germany.

THE AKRON FOUNDRY CO., Akron, O., manufacturer of iron castings and structural iron work, has increased its plant by the addition of a 50 x 50-ft. extension to its foundry and machine shop for use in its structural iron business. The building is of brick, one story high in the foundry and two stories in height in the machine shop end, and is equipped with new cranes, car equipment and tracks. A 50x60-ft. extension is also being made to the pattern shop. The company reports an excellent business.

THE STAR DRILLING MACHINE CO., Akron, O., is enlarging its plant by the addition of a new foundry, 60 x 100 ft. The building is of brick, one story high, with a slate roof, and will employ 30 additional men. It is hoped to have it finished and in operation within three weeks. Mr. H. W. Cole, Secy. and Treas., has resigned and withdrawn from the company, and Mr. H. A. Hine, formerly Assistant Treasurer, has been elected to succeed him. The company reports its plant as fully engaged and an unusual volume of business on hand.

MR. EDWIN THACHER, Paterson, N. J., engineer and contractor, who went to Porto Rico the latter part of October, returned to the United States on Dec. 12. While in Porto Rico he closed a contract with Capt. Judson, Corps of Engineers, U. S. A., President Board of Public Works, Department of Porto Rico, for two large concrete steel bridges on the Military road leading from San Juan to Ponce; one over the Jacaguas River at Juana Dias having a length of 404 ft., and the other over the Guayo River near Ponce, having a length of 270 ft. Work will commence at once, and he expects to have both bridges completed by Aug. 1, 1900.

THE PENN FOUNDRY & MFG. CO., Akron, O., has just removed there from Pittsburg, Pa., where it was formerly known as the W. Gordon Miller Co. The company has erected a well-equipped plant in Akron to manufacture its line of specialties, and with a view to entering more largely into the manufacture of iron castings and special machinery. The buildings cover over 450 ft. frontage and include a foundry, 46 x 152 ft., containing all the latest improvements; a molding-room, 76 x 112 ft., and sundry other buildings, all of brick. Excellent shipping facilities are secured by means of two railway switches crossing the property. The officers of the company are: President, W. Gordon Miller, Pittsburg; Secy., W. W. McIntosh, Akron; Treas., C. I. Bruner, of the Wilcox-Bruner Co., Akron.

THE FRED. M. PRESCOTT STEAM PUMP CO., Milwaukee, reports that it has in course of construction some of the largest mine pumping engines ever built, and claims the distinction of having recently received contracts for the largest single order for pumps of the direct-acting type, as well as for the largest crank and fly-wheel type, ever let in America for underground installation. The company is building for the Aurora mine, belonging to the Carnegie interests, two six-cylinder triple expansion pumps of the direct-acting type, which will have a capacity to deliver 2,-000 gallons of water a minute, against a pressure due to a vertical head of 1,100 ft. In other words, these pumps will be located 1,100 ft. under ground and pump the water to surface in one lift. The crank and fly-wheel plant mentioned refers to an order from the Penobscot Mine in Minnesota, for two pumps having a capacity of 7,000 gallons a minute. In this instance the stations in which these pumping engines are to be installed will be cut at a depth of 310 ft., and this will be the head against which water will be delivered. It will take two 19 and 35 x 36-in. cross compound Corliss engines to run these pumps.

NEW COMPANIES.—Perry Combination Hammer & Nail Extractor Co., San Francisco, Cal.; $50,000; H. P. Dwight, F. A. Dodge, C. E. Perry, San Francisco.

Duluth Foundry & Machine Co., Duluth, Minn.; $50,000; A. S. Chase, Duluth; W. M. O'Donnell, P. W. Herzog, St. Paul.

Broadway Storage Co., Boston, Mass.; $100,000; O. H. Luke, L. C. Whiting.

Springfield Brick Co., Springfield, Mass.; $50,000; A. N. Mayo, G. E. Funk.

Jackson Gas Burner & Supply Co., Portland, Me.; $100,-000; F. A. Bailey, Pres., Cambridge, Mass.; E. B. Blandy.

Beacon Contracting & Construction Co., Corporation Trust Co.'s Bldg., Jersey City, N. J.; $125,000; Leslie J. Montgomery, Henry K. Landis.

American Switch Co., New York, N. Y.; $11,000,000; William A. Doyle, Chicago, Ill.; Edward Shearson, New York.

Alabama & Georgia Iron Co., 55 Montgomery St., Jersey City, N. J.; $1,300,000; Phillips Isham, New York; F. M. Jeffery, East Orange, N. J.

Iron Oxide Paint Co., Overlook Ave., Hackensack, N. J.; $200,000; John L. Fuelling, Brooklyn, N. Y.

Imperial Copper & Gold Mining Co., Encampment, Wyo.; $1,000,000; B. E. Burger, Merrill; B. L. Hibbard, Milwaukee, Wis.

Grand Rapids Malleable Co., Grand Rapids, Mich.; $125,000; T. J. O'Brien, E. Lowe, Grand Rapids.

Chemical & Electrical Co., New York, N. Y.; $2,000,000; W. Scott Sims, Leonard B. Levake.

Safety Appliance & Equipment Co., Portland, Me.; $100,000. J. E. Kimball, Boston; F. E. Rowell, Rittery, Me.

Boston-Philadelphia Zinc & Lead Co., Portland, Me.; $200,000; H. L. Cram, Leroy L. Hight, Portland.

The Weber Electrical Manufacturing Co., New York city, N. Y.; $1,000,000; J. Pott, J. Weber, New York city.

Lake Shore Engine Works, Marquette, Mich.; $100,000; A. Kidder, P. White, Marquette.

American Locomotive Sander Co., 106 Market St., Camden, N. J.; $200,000; Chas. Longstreth, Lansdowne, Pa.

Stockton Iron Works, Stockton, Cal., mechanical work; $200,000; W. H. Lyons, W. E. Tretheway, Stockton.

Imperial Iron Co., Camden, N. J.; $7,000,000; W. J. Haerther, L. H. Lamb.

Consolidated Electric Co., Manchester, N. H.; $250,-000; T. H. Armstrong, Waltham, Mass.; E. S. Whitney.

Standard Paving Co., San Francisco, Cal.; $60,000; M. B. Maynard, A. E. Latham.

Rilatt & Barrett Dry Dock Co., Camden, N. J., $100,-000; George Barrett, Frank J. Barrett.

Economical Vehicle, Automobile & Transportation Co., 115 Orchard St., Newark, N. J.; $100,000; Sylvester H. Williams, H. F. Neetus.

New Jersey & Missouri Zinc Mining Co., East Orange, N. J.; $100,000; Fred. W. Garvin, C. Fred. Smith.

Electro-Vulcan Co., Berwick, Me.; $500,000; C. N. Farham, Hartford, Conn.; L. M. Heery, Lowell, Mass.

Sub-Surface Torpedo Boat Co., 152 Market St., Paterson, N. J.; $1,000,000; Clarence L. Burger, Wm. Barbour.

Economy Machine Co., Portland, Me.; $300,000; C. S. Pierce, A. E. Johnson, Brockton, Mass.

Industrial Water Purifier Co., Chicago, Ill.; $100,000; E. L. Johnson, W. B. McIlvaine, Chicago.

Ft. Wayne Traction Co., Ft. Wayne, Ind.; $2,000,000; J. H. Bass, Ft. Wayne; W. P. Eells, Rockey River.

Colonial Automobile Co.; Portland, Me.; $500,000; G. A. Dew, Melrose; A. W. Kent, Boston, Mass.

Royal Steel & Iron Co., Portland, Me.; $5,000,000; H. D. Sawyer, C. E. Billings, Boston, Mass.

Malleable Steel Range Manufacturing Co., Indianapolis, Ind.; $40,000; I. A. Sibley, W. A. Kizer, South Bend.

Central Telephone & Telegraph Co., Wilmington, Del.; $125,000; W. D. Bannard, Philadelphia; W. C. Mayne, Bristol, Pa.

Globe Telephone Manufacturing Co., 201 Federal St., Camden, N. J.; $125,000; H. Walter Roberts, Philadelphia.

Pennsylvania Engineering Works, New Castle, Pa.; $150,000; E. N. Ohl, J. W. Reis, New Castle.

Philadelphia Clay Mfg. Co., Philadelphia, Pa.; $1,000,-000; P. W. Adler, J. J. Hill, Philadelphia; H. K. Wood, Carlisle, Pa.

General Tunnel Engineering Co., New York, N. Y.; $250,000; D. J. Newland, A. P. Knight.

Warehouse Construction Co., Council Bluffs, Ia.; $50,-000; E. H. Merriam, H. A. Searle.

The San Jose Petroleum Co., Panoche, Cal.; $500,000; H. W. Conkling, J. P. Hall.

Poston Oil Co., San Jose, Cal.; $300,000; I. F. Poston, Selma; J. Sutherland, Lawrence.

Midland Brick & Terra Cotta Lumber Co., Wheeling, W. Va.; $1,000,000; C. W. Franzheim, J. N. Vance.

Rubber Tire Company of America, New York, N. Y.; $5,000,000; A. L. Barber, S. F. Davis.

Globe Iron Works, Memphis, Tenn.; $50,000; J. Lee.

Globe Railway Supply Co., Dallas, Tex.; manufacturing patent truck lifter; $100,000; J. M. Buther, G. Broun, Denver, Col.

Chaquette Electric Dredge Co., Corporation Trust Co. Bldg., Jersey City, N. J.; $1,000,000; Berthold Block.

Condon Pipe Bending Machine Co., Chicago, Ill.; $10,-000; H. F. Condon, W. N. McEwen, Chicago.

The Cameron Steamship Company, New York, N. Y.; $200,000; J. S. Cameron, Walter D. Munson.

The New Dominion Oil Co., Los Angeles, Cal.; $100,-000; G. W. Sessions, E. W. Babcock.

Muntjac Oil Mining Co., San Francisco, Cal.; $100,000; John Moss, W. J. Shotwell.

Flashlight Oil Co., San Francisco, Cal.; $200,000; Fred R. Turner, Jas. B. Sheat.

Gray Eagle Oil Co., San Francisco, Cal.; $250,000; N. K. Masten, W. D. Tobey, C. H. Phillips.

Litchfield Foundry & Machine Co., Litchfield, Ill.; $70,-000; M. M. Martin, P. F. Carroli.

Northwestern Gold & Platinum Dredging Co., Seattle, Wash.; $1,000,000; C. W. Norris, Chicago, Ill.; F. Bausman, Seattle.

Clinton Electric Co.; Clinton, N. Y.; $50,000; to furnish gas and electricity; J. N. Williamson, Ozone Park; T. F. McBride, Clinton.

Electric Car Lighting & Heating Co.; Portland, Me.; $500,000; C. H. Morse, Cambridge, Mass.; W. M. Chapman, Needham, Mass.

Union Steel Co., Pittsburg, Pa.; $1,000,000; W. H. Donner, A. W. Mellon, Pittsburg.

The National Tin Plate Co., Wheeling, W. Va.; $5,000,-000; W. H. Rogers, L. S. Lewis.

The Artificial Lumber Co. of America; $12,000,000; H. S. Seymour, W. H. Gray, T. E. Otis, Jersey City.

The Crimora Manganese Co.; $2,400,000; operating manganese mines; W. N. Phœnix, Mendham, N. J.; H. B. Loder, Wyoming, N. J.; George C. R. Degan, New Durham, N. J.

New York Air Compressor Co., Arlington, N. J.; $100,-000; J. W. Duntley, Pres.; Alexander MacKay, Vice Pres.

The Baker Forge Co., recognized as the Steel Car Forge Co.; Ellwood, Pa.; $200,000; H. R. Rea, Pres.; J. H. Frazer, Secy.

Buckhorn Oil & Transportation Co., San Francisco, Cal.; $200,000; G. B. Merrill, M. L. Davis, W. Ames, San Francisco.

Old River Dredging Co., Stockton, Cal.; $100,000; R. P. Land, J. Fyfe, E. L. Wilholt, Stockton.

Philadelphia & Atlantic City Automobile Co., 312 Market St., Camden, N. J.; $100,000; P. A. Dempsey, H. H. Hetzel, Philadelphia; John L. Semple, Camden, N. J.

Anderson Perpetual Teredo-Proof Pile Co., San Francisco, Cal.; $1,000,000; J. L. Lyon, T. A. Kirkpatrick.

Auto-Protective Appliance Co., Boston, Mass.; $1,000,-000; to sell manufacturing productions; P. C. Howe, G. Baker, J. H. Eastman.

Georgia & Alabama Mining Co., Birmingham, Ala.; $300,000; H. F. Debardelben, Morris Adler.

Messerer Automobile Co., 792 Broad St., Newark, N. J.; $300,000; Stephen Messerer, Adolph Goldfinger, Joseph Fisch.

Standard Engineering & Contracting Co., New York, N. Y.; $10,000; J. R. Volk, 146 E. 46th St., New York.

Marconi Wireless Telegraph Co. of America, New York, N. Y.; $10,000,000; G. Marconi, London, England; I. L. Rice, August Belmont., New York.

Howard Automobile Co., Trenton, N.J.; $200,000; F. H. Williams, G. B. Yard, W. Howard, Trenton.

Granada Gold Mining Co., Colorado Springs, Colo.; $1,250,000; F. W. Stehr, Leonard E. Curtis, Colorado Springs.

Gold Belt Consolidated Electric Co., Denver, Colo.; $300,-000; C. F. Iacombe, M. L. Stern, Thomas Keely.

Indian Valley Oil & Land Co., Modesto, Cal.; $200,000, paid in $72,000; C. W. Wood, Los Banos; Edward Bambauer.

True Blue Oil Co., San Francisco, Cal.; $500,000, paid in $145; Philip Kiefer, J. D. Strange.

Racine Fire Engine Co., Chicago, Ill.; $5,000,000; R. B. Sigatoeas, C. D. Varrel, Chicago.

Professor Hart's Flour Mining Co., New York, N. Y.; $1,000,000; H. W. Hart, P. Sheldon, New York, N. Y.

Sanitary Sewer Co., Philadelphia, Pa.; $300,000; J. H. Cromie, Jr., Camden, N. J.; G. S. Wertmer, Philadelphia.

Royal Lead & Zinc Mining Co., Chicago, Ill.; $1,000,000; C. D. Clark, G. J. Murray, Chicago.

Rote Standard Track Brake & Brake Beam Co., Camden, N.J.; $100,000; S. M. Paterson, W. W. Irvine, Camden.

Oregon Copper Smelting Co., Portland, Me.; $1,250,000; J. H. Drummond, Jr., Portland, Me.; L. J. Powers, Springfield, Mass.

Sterling-Meaker Co., Corporation Trust Co. Bldg., Jersey City, N. J.; $800,000; operate railroads; Wm D. Basley, Walter Bryers.

Iron & Steel Foundry Supply Co., New Jersey Corporation Guarantee & Trust Co. Bldg., Camden, N. J.; $1,500,-000; Thos. S. Moffitt, R. D. Wells.

Golden Belt Mfg. Co., 765 Broad St., Newark, N. J.; $2,000,000; J. T. Wilcox, George M. Gales.

Catasauqua Rolling Mill Co., New Jersey Corporation Guarantee & Trust Co. Bldg., Camden, N. J.; $100,000; Chester R. Baird, Nicholas H. Wagner.

Horner Sanitary Sink Co., New Jersey Corporation Guarantee & Trust Co. Bldg., Camden, N. J.; $125,000; S. E. Horner, C. E. Woodruff.

Gear Hydrant & Supply Co., 1 Montgomery St., Jersey City, N. J.; $1,000,000; Edward B. Merrill, Joseph Tucker.

Multiple Valve Coupling Co., Portland, Me.; $500,000; Nelson H. Medbury, E. Providence, R. I.; Charles L. Marston, Yarmouth, Me.

Massillon Iron & Steel Co., Massillon, O.; $150,000; C. M. Russell, J. J. Pitts, Massillon.

Virginia Gold & Copper Mining Co., Virginia City, Mont.; $250,000; G. J. Marks, J. N. Kirk.

Iowa, Dakota & Minnesota Telephone Co., Sioux Falls, S. Dak.; $500,000; B. C. Way, Britt, Ia.; J. Kerby, Sioux Falls.

Montana Power Transmission Co., Corporation Trust Co. Bldg., Jersey City, N. J.; $1,000,000; Christie P. Hamilton.

International Motor Wheel Co., Corporation Trust Co. Bldg., Jersey City, N. J.; $250,000; Oscar L. Lefferts, Edward B. Hawkins.

Seaboard Iron & Steel Co., Corporation Trust Co., Bldg., Jersey City, N. J.; $1,500,000; Samuel B. Sexton, John C. Scott.

Mexican Construction & Development Co., Summit, N. J.; $100,000; Thomas Watson, Cranford, N. J.; F. A. Dillingham, Summit, N. J.

Schuylkill Iron & Steel Co., Trenton, N. J.; $5,000,000; H. Delaplan, Merion, Pa.; W. H. Tennison, Camden, N. J.

Bowers Southern Dredging Co., Galveston, Tex.; $600,-000; C. Clark, B. K. Crowell.

Great Lakes Mining & Smelting Co., Grand Encampment, Wyo.; $2,000,000; I. Craire, J. Murphy.

Automatic Railroad Car Coupler Co., Stockton, Cal.; $5,000,000; C. Orletz, V. Galgiaux.

Sprague Car Appliance Co., Portland, Me.; $500,000; C. F. Johnson, Belmont; W. R. May, Newton.

Hudson Gas Motor & Vehicle Mfg. Co., Saratoga Springs, N. Y.; $100,000; I. B. Fryer, Ballston Spa; J. P. Brennan, Saratoga Springs.

Ball Electric Co., Yonkers, N. Y.; $300,000; E. M. Roberts, Brooklyn; E. S. Remson, Dobbs Ferry.

Valley Ore Co., Covington, Va.; $2,000,000; G. L. Carter, Bristol, Va.; E. C. Means, Ashland.

American Ry. & Transportation Co., 243 Washington St., Jersey City, N. J.; $500,000; Adrian H. Larkin, Nutley, N. J.; Fred. K. Quine, Jersey City.

Walter Steel Co., 83 Montgomery St., Jersey City, N. J.; $100,000; Andrew Bryson, New York; Jos. V. Clark, Jersey City.

Steam Motor Engine Stop Co., Portland, Me.; $500,000; G. E. Clifford, Fitchburg; L. P. Cote, Somerville.

Pioneer Steel Elevator Co., Minneapolis, Minn.; $200,-000; W. D. Douglas, Cedar Rapids, Ia.; J. L. Washburn.

Chicago Cement Coating Co., Chicago; $100,000; W. C. Shipnes, R. Starck.

Alpena Portland Cement Co., Alpena, Mich.; $300,000; W. H. Johnson, F. W. Gilchrist.

De Camp Engine Co., St. Louis, Mo.; $250,000; E. L. Gottschalk, C. C. Weaver.

Tar Kiln Zinc Mining Co., Portland, Me.; $2,000,000; O. Hill, J. Gilbert, Providence, R. I.

Bruce Mining & Smelting Co., Webb City, Mo.; $400,000; W. N. Snow, E. E. Lyman, L. J. Gunn, Greenfield.

Mail Delivery Notice.

Special efforts are made to deliver our paper to its readers each week at the earliest possible moment. All papers for Boston, Philadelphia and Washington are usually in the New York post-office by midnight Wednesday evening; all Brooklyn and New York city papers by 3 o'clock—in ample time for the first delivery Thursday morning. The entire edition, including foreign copies, is in the mail soon after 6 o'clock Thursday morning. If your paper is not received promptly we advise that you make a complaint to your local post-office officials.

If you want additional help, or to procure second-hand tools, machinery, plant, etc., try a "Want" card on page XXI

If you have anything to sell or to rent, we suggest that you advertise for a few weeks on one of our "For Sale" pages XXII-XXIII

If you want bids for doing any work, or for furnishing supplies, try an advertisement on a "Proposal" page XXV-XXVIII

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